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THE RIDDLE OF UNEMPLOYMENT  
AND ITS SOLUTION

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# THE RIDDLE OF UNEMPLOYMENT AND ITS SOLUTION

BY  
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"THE LAW OF BIRTHS AND DEATHS"

"Down the vast perspective of the past we see the wake of the unemployment problem. It is as old as the hills, and no schoolboy has yet been born who has been able to solve this Sphinx like riddle."

*City Editor of The Times.*



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*Manufactured in Great Britain*

## PREFACE

MANY and various have been the explanations put forward of the great waves of unemployment which sweep through our modern industrial society at fairly regular intervals. Among them are sunspots, high wages, natural laws, too much saving, and the exhaustion caused by war. It would be rash to say that the sunspots explanation, though it requires little refutation, is the most untenable. All these explanations ignore the plainest facts of the situation. For instance, the highest wages are invariably paid when trade is at its best, and it is the countries of high wages which are the most prosperous. Moreover, the nominally high wages paid since the war are high only when expressed in paper. Real wages are very little higher than before the war, and the recent fall has been a fall in paper wages also. Expressed in gold it is probable that wages have changed little.

As for the exhaustion caused by the war, this explanation is absurd in every way. It ignores the fact that these periodical slumps occur with almost as great an intensity during

times of the profoundest peace. And what is meant by the term "exhaustion"? Obviously not physical exhaustion, for there is no reason to suppose that the human race has ever been more fit physically than now. As a matter of fact the death rate has never been so low. It is certainly not exhaustion of materials for, although Russia and Austria are in a bad way, there are plenty of goods and materials of all kinds available throughout the world as a whole. For instance, the British coal miners can raise far more coal than they can dispose of. There is plenty of wheat, plenty of cotton, plenty of rubber, in fact plenty of everything necessary for commerce and the greatest industrial prosperity. Never before have we been so well equipped with machinery, never so well organised industrially, never so rich in scientific and technical knowledge. And yet in this country alone there are, or have been, nearly a couple of millions unemployed—in want amid the abundant resources of Nature which lie ready to their hands but for the mysterious spell which prevents them from putting out their hands and making use of these resources?

As Mr J. A. Hobson puts it: "The simplest diagnosis of a depression is that it shows all the factors of production simultaneously existing in excess of the actual industrial requirements. Not in this trade or in that, but throughout the whole industrial field are found

mines, mills, foundries, railways, factories, warehouses, shops, with the labour that belongs to them, working short time or lying idle. There is more productive power of every sort than is wanted for actual production. Why cannot these productive factors co-operate to produce commodities as heretofore when trade was active? Because the organisers of production have reason to believe that, if they set the available productive power fully at work, they could not sell the product at a price which would cover the expenses of production."<sup>1</sup> Obviously, the solution of the riddle then is to be found in the answer to the question why the goods cannot be sold at a price which would cover the expenses of production. In other words: why do prices fall? It is idle to talk vaguely about natural laws. All the laws which operate in Nature are natural, including the laws of political economy. That suggestion will only serve as an explanation when the laws in question are scientifically formulated.

Mr Hobson himself suggests that slumps are caused by an excess of production over consumption arising from a too great tendency to save, itself the result of an inability or unwillingness to spend up to income on the part of the more prosperous sections of society. But people save, not because they cannot spend,

<sup>1</sup> *The Industrial System*, p. 288.

but in order to 'accumulate. There are no limits to the possibility of spending, and people spend even in the very act of saving. They either invest their money themselves or get banks or other institutions to do it for them. The greater part of the people's savings goes towards increasing production, and a good deal in the provision of amusements and social facilities generally, such as railways and tramways. So, far from promoting unemployment, it is saving alone in the broadest sense which renders employment and social progress possible.

Mr Kitson has declared that both the explanation and the remedy are so simple that even a schoolboy ought to be able to grasp them.<sup>1</sup> In this he is quite correct; but, unfortunately, he has not explained the matter in such a way that a schoolboy could understand it. His exposition of the cause has been obscured by various financial fallacies which it is part of the purpose of this book to correct, and his explanation of the cure is only half complete. He has sketched out accurately the ideal currency system, but has failed to suggest the most essential means for making that system effective, and, to make confusion worse confounded, has actually given in his allegiance to the Douglas scheme.

<sup>1</sup> *Unemployment: The Cause and a Remedy*, Arthur Kitson, p. 15.

Our statesmen wring their hands over the unemployment problem and assert that there is no remedy. At the same time they boast that they are spending many millions a year in doles, which are a mere palliative. Thanks to shrinking revenues they have abandoned all their schemes for making this country "a place fit for heroes to live in." They have cut down their housing plans, are cutting down their educational schemes, and are chopping away furiously with the axe at all schemes for social improvement. They are spending enough on unproductive doles, by the way, without getting a brick in return, to provide thousands of houses per annum, but the housing scheme was cut down because we cannot afford the money.

Yet the economic slump which has caused all these evils is the direct result of the deliberate action of the authorities, as can readily be shown; while the cause of it all and the remedy also are so simple that it will be possible to break the back of the unemployment problem and to provide the revenues for social reforms whenever they are prepared to follow the simple train of reasoning necessary to the elucidation of the subject, and that without any risky or wildcat schemes whatever.

The principles laid down in this work represent the principles underlying every boom or slump without any exception; but each particular boom or slump has its own special features,



some of which, at first sight, may appear to be inconsistent with or unexplained by these principles. But fuller examination and reflection will always show that the special features in question are fully consistent with the principles herein laid down, and that, properly understood, they really provide striking confirmation.

In another work (*The Law of Births and Deaths*, Fisher Unwin) it has been shown that the decline of the birth rate, which has rendered as large a proportion as one-third of the abler sections of the population of the chief civilised countries of the world absolutely childless and has reduced the average family of these same classes to an almost negligible figure, which has reduced the native born population of France by 400,000 during the last ten years, and which threatens the whole of our modern civilisation with ultimate overthrow, is the result of a natural law, and the action of the law has been traced throughout all grades of plant and animal life up to man, and even among unicellular organisms. It has further been pointed out that in order to obtain an intelligently regulated birth rate and thus obviate the danger of the ruin of our civilisation it will first be necessary to overcome the economic difficulties involved in order that it may be possible to give married couples a reasonably sure guarantee of continuity of employment. Only

then will it be possible to obtain families among the ablest sections of the population of the size necessary to maintain the population at a suitable figure and to ensure that each succeeding generation shall be bred from the best instead of from the most backward members of society. The first step in this direction is obviously to discover the cause of the great periodical slumps and provide a remedy. It is the main purpose of this work to show how simple the causes really are and how a simple and effective remedy can be provided.



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## CHAPTER ONE

### THE NATURE OF THE PROBLEM

THE various kinds of unemployment were most conveniently classified by E. S. Grogan in his work: *The Economic Calculus*, as epidemic, sporadic and endemic.

The last kind of unemployment is always with us and is due mainly to the defective organisation of our society in its arrangements for allotting individuals to the various available trades and employments. Many trades and professions are always overcrowded. There are too many clerks, for instance, owing to our modern educational system producing vast numbers of people of both sexes whose artificial standards of respectability render them keenly desirous of getting their living without soiling their hands. For this and similar reasons practically all the professions are overcrowded. Then there are far too many unskilled labourers, a considerable proportion of whom must nearly always remain unemployed. Our factory system, our telegraph service, and a host of similar employments absorb large numbers of growing lads and girls for the

period during which their labour is cheapest and then turn them off as soon as they begin to be ambitious to earn a fair wage, and usually when they have just passed the age when it is possible for them to get a chance to learn a suitable skilled trade. The progress of invention is continually thrusting men from the ranks of the skilled into the ranks of the unskilled, and our social organisation makes no provision for enabling such men to gain a footing in some other skilled trade. Then there are the seasonal slackenings in many trades, such as are usual with the building trade in winter, and which throw large numbers of men on to the labour market. These various classes of unemployment which are always with us may be justly described as endemic.

Sporadic unemployment is the result of occasional and temporary causes. A bad harvest may throw a considerable number of people out of employment. The burning down of a large factory, or a change of fashion may do the same. All causes of unemployment which are merely local and temporary in their effects may be classed as sporadic, and this, generally speaking, is the least important of the three great classes.

The most important class of all, and which will provide the main theme for this work, is that known as epidemic. It consists of those

great waves of unemployment which sweep through all civilised communities as the result of trade slumps, usually at intervals averaging about ten years, and generally lasting, with varying degrees of intensity, for several years. These "slumps" or periods of unemployment are the troughs between the wave-crests or commercial prosperity known as "booms." It is the magnitude of the evil caused by this class of unemployment which gives it supreme importance. The sporadic and endemic classes are relatively so small that, if it were possible to do away with slumps and the epidemics of unemployment caused by them, we could deal with the evil by means of better organisation and training, and by means of unemployment insurance without great difficulty. Were the economic wheel kept whirling swiftly and continuously the output of wealth would be such as to leave ample funds available for dealing with the comparatively small margin of unemployment left. But such an epidemic of unemployment as the present, showing probably more than two million people unemployed in this country alone at its most acute stage, literally overwhelms all attempts to grapple effectually with the evil. The output of wealth is vastly diminished, revenues shrink, insurance funds are eaten up, and the workers, unemployed for many months at a stretch, lose their efficiency



and a considerable portion of their self-confidence; while statesmen have nothing to offer in the way of remedial measures except the most inadequate of palliatives in the shape of doles. Obviously the problem of unemployment cannot be successfully dealt with until the cause of the epidemic variety has been ascertained and a remedy found.

It is not, of course, possible to draw an absolutely definite line between one class of unemployment and another. There are some forms of very dubious classification. Thus the demobilisation which follows a war necessarily causes a large amount of unemployment since the vast numbers of men discharged cannot all be assimilated immediately, and, while this form of unemployment is of comparatively infrequent occurrence in any one country, and might, therefore, be described as sporadic, it is frequently on a scale which would justify the use of the term "epidemic." But, though there must necessarily be some temporary unemployment as the result of the demobilisation which follows a great war, there is no need for the agony to be long drawn out. With a healthily organised economic system such temporarily disorganised labour ought to be speedily absorbed. In practice, however, it is not absorbed speedily and wars are invariably followed by long periods of severe commercial depression.

## CHAPTER TWO

### THE CAUSE OF SLUMPS

A SLUMP in trade is invariably associated with a slump in prices. Most people are inclined to look upon the former as the cause of the latter; but the reverse order of causation is probably the true one. As Kitson has pointed out, a slump in trade is always accompanied or preceded by a financial crisis. It is this financial crisis or tightness of money, which, for reasons to be made clear later, causes the fall in prices and the fall in prices causes the slump in trade.

Trade cannot flourish on a falling market. When prices begin to fall every business man ceases to buy and endeavours to sell. But selling is difficult owing to the fact that there are few buyers, and this leads to a further fall in prices. Thousands of people are thrown out of work and their purchasing power falls to zero, thus aggravating the situation still more. And a wave of unemployment is thus set up which sweeps through society bringing devastation in its train.

No one with the slightest acquaintance with

business would expect it to prosper when prices are falling. The business man buys for the express purpose of making a profit; but if he buys on a falling market he is bound to suffer a loss. During boom periods when prices tend to rise and goods are selling freely everyone buys freely. Purchasing power is abundant and business men borrow freely in order to lay in large stocks. The beginning of a slump usually finds them with thousands, scores of thousands, or even hundreds of thousands of pounds worth of goods in stock according to the size of the business. The margin of profit in manufacturing or warehouse businesses is usually quite small, the size of the total profit being due to the vastness of the turnover, and a very small fall in values is sufficient to turn a fair profit into a serious loss; while, as an immense amount of business is done upon borrowed money, that same small fall in values is often sufficient to convert a prosperous and solvent business into an insolvent one. A ten per cent. shrinkage in value, for example, upon a stock worth £100,000 means a loss of £10,000, yet within the last few months we have seen many lines of goods decline as much as 50 per cent. in value, or even more. The Co-operative Wholesale Society recently announced a loss of £3,000,000 as the result of the fall in value of their stocks; while large numbers of big firms have announced losses running into millions from the same cause.

Take the case of the boot trade. A large manufacturing firm may have thousands of pounds worth of leather in stock in normal times. If the price of leather begins to fall the price of the finished boot is likely to fall also, and the manufacturer may lose heavily on the stock of leather in hand. His only course is to cease to buy anything except what he can use up immediately, and to turn his stock of leather into boots as soon as possible. But large warehouse firms will have hundreds of thousands of pairs of boots in stock, and even retailers in a fair way of business may have thousands of pairs. They are also bound to follow the same policy. They will buy only such goods as are in immediate demand, and endeavour to unload the rest. But the buying public have found out that prices are falling. Smith, Brown and Jones calculate that by making their present boots last a little longer they will be able to buy much more cheaply later on. Moreover, large numbers of people are now unemployed and still greater numbers are afraid of losing their employment. A great wave of economy sets in and sellers find themselves unable to sell just when they are most anxious to do so. The manufacturer finds his orders shrink in a marvellous way and, consequently, he must dismiss many men and cut his purchasing down to zero.

Another good example of the way in

which falling prices paralyse trade and cause unemployment is provided by the building trade. In spite of an abnormal shortage of houses values have fallen 25 per cent. within the past few months. What private individual would undertake to build houses under such circumstances? To a speculative builder it would mean ruin. A heavy loss would have been incurred before a house was finished. No individual would build a house even for his own use unless forced to do so by inability to get one otherwise. The net result has been that since the close of the war building of houses has been almost exclusively the monopoly of the Government and municipalities, and their operations have been conducted at a heavy loss to the payer of rates and taxes.

Another excellent illustration was the recent offer of Lord Ashfield to proceed with developments of the underground railways of London to the extent of £5,000,000 if the Government would guarantee the shareholders against loss, a plan which would provide employment for 20,000 men for two years. Values were still declining, and a further decline of 10 per cent. would mean that £500,000 would have to be written off as dead loss upon such an undertaking before a penny had been earned and even before the work was finished, without taking into account normal depreciation.

Naturally, financiers and shareholders are not inclined to throw money away in that manner, and unless the Government see their way to give the necessary guarantee the work will be held up until it becomes apparent that the fall in prices has ceased.<sup>1</sup> But it is very difficult to say with certainty at any time that prices have ceased to fall, so that and thousands of similar enterprises of varying magnitudes all over the country may be held up for indefinite periods, while nearly two million people remain without work.

Such a situation leaves business men with no alternative but to cease to buy, to cut down expenses in every possible way by dismissing hands for whom employment cannot be found, and to unload accumulated stocks as readily as possible. While where firms have been trading upon loans which the banks refuse to renew they are often forced to realise at any price in order to be able to meet their obligations, and many are driven into liquidation. With scores of thousands of firms practically ceasing to buy and with a general holding up of enterprise throughout the country until the fall in prices has ceased, it is not remarkable that a couple of million people should become unemployed.

<sup>1</sup> The Government have now agreed to guarantee the interest on the capital expended and the work has been put in hand, but there are thousands of enterprises held up for lack of a guarantee.

Thus a rapid fall in prices is fatal to trade and is the direct cause of unemployment. The present depression may last, with varying degrees of severity, for years unless a remedy is found and confidence restored. What we are accustomed to refer to rather vaguely as "confidence" is merely a belief in the relative stability of prices in the immediate future.

Simple and obvious as this explanation is it is by no means generally recognised. Kitson has stated it rather vaguely in his various works, but his statement of the case has been obscured by a variety of fallacies in regard to interest, which he appears to look upon as the real cause of the periodical slumps.<sup>1</sup>

The City Editor of *The Times*, replying to a series of articles upon unemployment by Mr Kitson in the *Times Financial Supplement*,<sup>2</sup> not only fails to grasp this simple explanation, but evades the whole problem at issue in a series of fallacious illustrations. Thus he declares that "if we require a higher price (i.e., a larger amount of food or raw materials) than, say, Germany requires for the same kind of goods, we are unable to exchange our goods, and there is consequent over-production and unemployment."<sup>3</sup> But we are unable to sell

<sup>1</sup> See *Unemployment*, p. 51 et seq.

<sup>2</sup> Republished by Mr Kitson in *Unemployment*.

<sup>3</sup> *Ibid.*, p. 65.

our goods during slumps even if we charge as low a price as Germany or any other nation. Moreover, Germany can only supply a fraction of the world's needs, and the rest of the world has an abundance of goods which it would willingly exchange for our goods if only it could do so. For some reason, although abundant goods of all kinds are available, they cannot be exchanged. The cotton growers of the Southern United States actually burned a large portion of their crop a few months ago because they could not dispose of it at a remunerative price, and because a smaller crop was of more value to them than a larger one. Meanwhile, English workers, who could easily produce abundant goods to exchange against the cotton, and who are quite willing to do so, go threadbare. The wheat growers of Australia have—or had—gigantic stocks of wheat rotting in store because they cannot dispose of it. They would willingly exchange it for English goods—motor-cars, and the like—but cannot. Meanwhile, nearly 2,000,000 British unemployed, who are able and willing to produce all kinds of goods in exchange for this wheat, go hungry or ill-fed. Their efforts are paralysed. There is no reason whatever why a lower cost of production in Germany, which is not absorbing Australia's wheat, should prevent exchange between England and Australia.



Again he says: "If we produce 1,000,000 motor-cars for our own use and another 1,000,000 for the use of foreigners, how are we going to sell the second million unless somebody not only has the cash to buy them but also *wants* them?"<sup>1</sup> The answer is that somebody *does* want them. There is scarcely a business man throughout the world who would not like a motor-car if he could afford one, while a vast proportion of those who already have them would like to exchange older and obsolete models for more up-to-date ones. The world's desire for motor-cars has certainly not been satiated yet. But, though the cotton growers of India, Egypt, and America, and the wheat growers of Australia, Argentina, and Canada would willingly take our motor-cars if they could afford them, and although they can grow an abundance of the cotton and wheat which we need in exchange, yet the exchange is paralysed. Why? Simply because neither side can first turn its products into money. It cannot do so because its customers, the other side of the exchange, have ceased to buy. And they have ceased to buy because they dare not buy on a falling market on pain of ruin. Surely the City Editor of *The Times* knows from his acquaintance with the Stock Market, that to buy when prices are falling means disastrous loss, and surely he should be able to see that

<sup>1</sup> *Unemployment*, pp. 67-8. -

the same commonsense rule holds in regard to goods.

Another example of fallacy is this: "Let us suppose that Argentina has planted seed to produce 2,000,000 quarters of wheat and that, owing to a visit of some destructive parasite, the whole of the wheat is destroyed. The Argentine farmers, instead of sending wheat to this country and taking agricultural machinery, motors, clothes, and champagne in payment, go without. The makers of these goods are therefore thrown out of employment."<sup>1</sup> Not necessarily. We export only that we may receive in exchange such goods as we do not ourselves produce. Now we know from experience that an exceptionally bad harvest in one country, Argentina, for instance, is invariably compensated for by an exceptionally good harvest in some other country, as India, Canada, or Australia, and the goods which cannot be exchanged for the surplus wheat of one country can, or should, be exchanged for the surplus wheat of another. Russia is a good example, for although she has temporarily ceased to produce for the world's market there is no shortage of wheat. We can purchase all the wheat that we require, and the countries holding it are quite willing to trade if only the exchange difficulties can be overcome. All the unemployment which need be caused by the instance

<sup>1</sup> *Unemployment*, pp. 73-4.

given is a certain amount of sporadic unemployment in Argentina itself, and it is absurd to put forward such cases as if they offered some explanation of the present disastrous slump.

In point of fact Mr Kitson's critic nowhere deals with the main problem, the cause of the great periodical slumps. He confines his suggestions as to causes entirely to the sporadic and endemic types of unemployment. Thus he declares that "the solution of the unemployment problem lies, not in the manufacture of money, but in the regulation of complementary production."<sup>1</sup> The answer to this is that non-complementary production only exists in the production of articles which the public does not want, and this is regulated automatically by the manufacturers of such articles going out of business. A certain amount of casual miscalculation of that character is always with us, whether in booms or slumps, and such trivial suggestions offer no explanation of a vast and sudden collapse of trade, like that which produced the present flood of unemployment. At the commencement of the slump every kind of complementary product which the world required was being produced in abundance; but during a slump it is impossible to exchange complementary products which nearly everybody needs. The

<sup>1</sup> *Unemployment*, p. 73.

people want these things, but cannot buy them because they cannot first turn their own products into purchasing power, and they cannot do this because no one will buy on a falling market.

There is a good deal of vague talk about unemployment being the result of natural laws; but those who talk so glibly about these laws never attempt to formulate them. There is nothing wrong with the statement if properly understood. The natural laws which produce unemployment are three in number. First, that no one will buy on a falling market. Second, that a fall in prices is the inevitable result of a contraction of credit. Third, that a contraction of credit is the inevitable result of an unscientific currency system as soon as the amount of credit which it is possible to issue upon the available basis of legal tender ceases to bear an adequate proportion to the output of goods. If those who talk so freely and vaguely about natural laws will only memorise these three we shall be nearing a solution of the problem. Natural or not natural, there is nothing in them which prevents us from taking intelligent steps to obviate their unfortunate consequences, any more than the fact that gravity is a natural law prevents us from making use of ladders, parachutes, or aeroplanes.



## CHAPTER THREE

### MONEY AND PRICES

IF falling prices are the immediate cause of bad trade then it is obvious that in order to find the ultimate cause of trade slumps we must inquire what are the causes of falling prices. But before that is possible it will be necessary to examine briefly the relation between prices and money.

There is a pretty general agreement among economists that prices, other things being equal, depend upon the quantity of money in circulation. Properly stated, indeed, the "quantity theory" is almost self-evident, but much confusion of thought is caused by improper statement, which usually takes the form of using the term "money" in the narrow sense of legal tender. It is not money in the narrower sense of legal tender but money in the broader sense of purchasing power which governs prices. Thus the great rise in prices which followed the war was justly attributed to the excessive output of legal tender; yet this was frequently denied on the ground that it could readily be

shown that prices were sometimes rising when the output of legal tender was less and sometimes falling when the amount of legal tender on the market was increasing. But purchasing power is not limited by the amount of legal tender. Upon the basis of legal tender is reared a vast edifice of bank credits which may have several times the amount of purchasing power of the legal tender upon which they are based. Bankers, however, do not always issue the maximum amount of credit which a given basis of legal tender renders possible, nor is the rate of circulation always at its maximum, and it may sometimes happen that the amount of credit issued upon the amount of legal tender available is less than that issued at another period upon a smaller amount. It would be possible, therefore, to have higher prices upon a given basis of legal tender at one time than upon a larger basis of legal tender at another; but this in no way alters the fact that prices, other things equal, vary directly as the amount of purchasing power available, or that purchasing power varies, *other things equal*, directly as the amount of legal tender available.

Stated in its simplest form the law of prices is as follows:—Prices vary directly as the amount of purchasing power and inversely as the amount of goods available.

In any given period in any given market the sum of the money or purchasing power expended

must exactly equal the sum of the prices of the goods bought and sold. Suppose that Mrs. Jones goes to the grocer and buys goods as follows:—

	s.	d.
2 lb. tea at 2s. 6d.	5	0
2 lb. butter at 1s. 8d.	3	4
4 lb. sugar at 6d.	2	0
4 lb. jam at 8d.	2	8
Total	13	0

It will be seen that the sum of the purchasing power expended exactly equals the sum total of the prices of the goods. Obviously if Mrs Jones expends a larger sum upon the same quantity of goods the average price per article must be higher; while it is equally obvious that she can only obtain a larger quantity of goods for the same sum if the average price per article is lower. The principles which control the grocery bill of Mrs Jones are exactly the same as those which control prices in the great markets of the world.

The law has been stated algebraically by Professor Irving Fisher<sup>1</sup> after the following fashion:—

$$MV + M'V' = PT$$

M represents the quantity of legal tender in circulation and V the velocity of its circulation; while M' represents the quantity of bank credits and V' the velocity of their circulation.

<sup>1</sup> *The Purchasing Power of Money*, Irving Fisher.

On the other side of the equation P represents prices and T the volume of trade. The volume of trade is really a compound factor made up of the quantity of goods multiplied by their velocity of circulation, for goods circulate to some extent as well as money. But for the most part goods flow in certain well-defined channels: thus manufactured articles mostly flow from the manufacturer to the warehouse and from the warehouse to the retailer. Sometimes, however, they go direct from the manufacturer to the retailer; while some classes of goods go from the manufacturer to the warehouse and thence to another manufacturer. Agricultural produce goes from the farmer to the market and thence to the retailer. Any given article may pass through a large number of hands, and there are many variations; but the comparatively well-defined character of the channels through which goods usually circulate renders it possible to consider prices as varying directly as the quantity of purchasing power and inversely as the quantity of goods, leaving aside the question of the velocity of circulation of the latter.

Thus we may formulate the law of prices algebraically from the equation given above by taking advantage of the rule that any factor may be transferred from one side of the equation to the other by reversing the sign.

$$P=(MV+M'V')+T$$



T stands for the volume of trade or the quantity of goods, and this equation shows that if we increase purchasing power ( $MV + M'V$ ) we necessarily increase prices ( $P$ ); while if we increase goods ( $T$ ) we necessarily decrease prices. If the whole of the goods in a market be exchanged against a given number of units of value the larger the number of such units the smaller must be the quantity of goods exchanged for each unit, and the smaller the number of units the larger must be the quantity of goods exchanged for each unit. In other words the greater the number of units of purchasing power the higher prices must be, and the smaller the number of units of purchasing power the lower prices must be. Any addition to the quantity of purchasing power issued by the banks will, apart from the small percentage which may be hoarded, necessarily increase prices if the quantity of goods remains the same; while a decrease in the amount of purchasing power under the same conditions will necessarily decrease them, since in the first case a larger quantity and in the second case a smaller quantity of purchasing power will be spread over the same quantity of goods.

A point to bear in mind is that it is not the quantity of money in existence but the quantity in circulation which determines prices. Money in the vaults of the bankers is not in circulation and, therefore, does not compete for the goods

available in the market. And money in the pockets of the people or hoarded does not compete for goods. If there are a certain number of beasts in a cattle market, for instance, and a certain number of buyers arrive with a given amount of money to spend on the purchase of cattle it is obvious that the average price of the cattle will be that amount of money divided by the number of cattle, provided that the money is all spent. And when we refer to the quantity of money in circulation we really mean the quantity of money spent, because circulation means spending. Rapidity of circulation means rapidity of spending. It is failure to remember such simple considerations as these which leads to misconceptions of the quantity theory.

An excellent illustration of how the quantity theory is misunderstood is provided by some remarks of Mr Asquith in the House of Commons on March 15th, 1920, reported in *The Times* next day, to the effect that it was nonsense to suppose that high prices were due to inflated currency and could be cured by deflation. They were due to under-production and over-expenditure. No doubt the latter factor counts, but the reply to such statements is that under-production *is* inflation if there is no corresponding reduction in the output of currency. Over-production of currency and under-production of goods are merely the

obverse and reverse aspects of inflation. All these arguments against the quantity theory involve a complete misunderstanding of the principle. They invariably consist in looking at one aspect of the problem only and in assuming that an increase of currency is identical with inflation. But an increase of currency will merely represent deflation if there is a still more rapid increase in the output of goods. It is not the mere increase or decrease of currency which makes inflation or deflation, but the ratio between the output of currency and the output of goods. As for the assertion that deflation is no cure for high prices, we have recently seen that it is but too deadly and disastrous a cure. Deflation will carry the reduction in prices just as far as we like to carry it. We can halve or quarter prices by merely carrying deflation far enough, but such a process would have a woeful effect upon the fortunes of the workers and business men.

Another illustration of the failure to grasp what the quantity theory means is provided by the following: "Traders like rising prices because of the stimulating effect of hope and optimism, inducing a general increase of effort and efficiency. Besides, their instincts are not trained to distinguish between the rise in prices caused by improved trade and another brought about by inflation of currency."<sup>1</sup> It would be

<sup>1</sup> G. B. Diblee, M.A., *The Laws of Supply and Demand*, p. 220.

impossible, however, to train their instincts to make such a distinction, because it does not exist. No "improved trade" with rising prices is possible without an improved effective demand, and there can be no improved effective demand to an extent causing a rise in prices without an inflation of currency. Effective demand is dependent on the supply of currency and an increase of prices always means an increase in the proportion of currency, or its rate of circulation to goods. In other words, an increase of prices is always the result of inflation, whether inflation results from an under-production of goods or an increased output of credit. Conversely, there can be no slump in trade with falling prices except as the result of a contraction of credit or deflation.

The same writer<sup>1</sup> quotes from *The Times* (October, 1911): "It is the paradox of modern civilisation that the more commodities are cheapened the dearer living becomes, and that the greater our command of natural forces and the ingenuity of our machines for utilising them, the severer do the conditions of labour grow." This passage admirably illustrates the mental confusion which produces such results. That a "cheapening of commodities" can be accompanied by dearer living is a contradiction, and the writer was evidently thinking of increased output which is not accompanied by a corres-

<sup>1</sup> *The Laws of Supply and Demand*, pp. 221-2.

ponding cheapening. But the cause of this is obvious enough. Why make a mystery of it? The demonetisation of silver in 1872 caused an immense contraction of the basis for legal tender throughout the chief commercial countries of the world and also rendered the world's vast annual output of silver no longer available as a legal tender basis for those countries. As a consequence prices fell steadily until the discovery of the cyanide process of extraction in the early nineties rendered it possible to work low grade ores at a profit. That was followed by an enormous development in the output of gold, and prices have been on the upward grade ever since until the commencement of the present period of deflation in 1920. There has been a continuous automatic process of inflation owing to the fact that the increase in the quantity of gold has been at a greater ratio than the increase in the quantity of goods. Here are a few facts in regard to the gold output<sup>1</sup>:—

Average annual output period	1856-60	£134,083,000
"	"	"
"	"	"
"	"	"
"	"	"
Output for 1912	...	...
		466,136,100

Thus for some time after the demonetisation of silver there was actually a big drop in the output of gold at a time when the output of goods was going up by leaps and bounds. A

<sup>1</sup> Taken from *Gold*, B. White.

long and heavy drop in prices was the logical consequence, and we got it. But after the discovery of the cyanide process the output of gold rapidly went up until in 1912 it was nearly three times its former value. There was certainly an increase in the output of goods, but it will hardly be claimed that it trebled during the same period. There is also good

#### ERRATA

Figures for gold production, page 38,  
should be dollars

operation of the quantity theory of money under a gold standard is illustrated by the following passage from Macleod: "All banking advances, then, are made by creating Credits or Deposits; and whether this Credit is transferred from one person to another by means of Bank Notes, or Cheques, in no way affects its nature or its quantity, and it is, this very

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"	"	"	"	1881-85	99,110,000
"	"	"	"	1891-95	162,947,000
Output for 1912	...	...	...	...	466,136,100

Thus for some time after the demonetisation of silver there was actually a big drop in the output of gold at a time when the output of goods was going up by leaps and bounds. A

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long and heavy drop in prices was the logical consequence, and we got it. But after the discovery of the cyanide process the output of gold rapidly went up until in 1912 it was nearly three times its former value. There was certainly an increase in the output of goods, but it will hardly be claimed that it trebled during the same period. There is also good reason to suppose that the increase in the efficiency of banking and business methods has greatly increased the rapidity of circulation of the amount of credit available. These things being so, a steady increase in prices was the logical consequence, and to insist upon making a mystery of it when we get it is folly. If the gold standard is restored and maintained the upward tendency in prices is likely to be resumed and to continue until the bottom drops out of some of the mines or until the increase in working expenses renders it impossible to work many of the poorer mines at a profit, thus reducing the output.

Another source of misunderstanding of the operation of the quantity principle under the gold standard is illustrated by the following passage from Macleod: "All banking advances, then, are made by creating Credits or Deposits; and whether this Credit is transferred from one person to another by means of Bank Notes, or Cheques, in no way affects its nature or its quantity, and it is, this very



thing which is creating so much 'alarm in the breasts of many persons when they see the huge mass of Deposits, or Banking Credits, for these Deposits are, in reality, neither more nor less than so many Bank Notes in disguise."<sup>1</sup> There are many passages in Macleod in which, as in the above, he completely loses sight of the distinction between legal tender and bank credit. Gold and bank notes are legal tender, while book credits and cheques are not.

Credit is based upon legal tender and notes are based, under the gold standard, upon gold; but neither bank notes nor gold are based upon book credits. The whole system of credit has been likened to an inverted pyramid of which gold forms the apex. Upon gold is based a larger quantity of legal tender notes, while a vastly greater superstructure of book credits is based upon the notes and gold together. If a million pounds of book credits are destroyed there is no corresponding destruction of notes or gold; but if a million pounds of legal tender notes are destroyed or withdrawn from circulation the superstructure of credit to a much greater amount which is based upon them disappears also; while if a million pounds worth of gold is exported, both the superstructure of bank notes and the superstructure of book credits disappear. It is this which constitutes one of the most essential vices of the gold

<sup>1</sup> *Theory and Practice of Banking*, p. 373.

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standard system because it leads to disastrous contractions of credit, and consequent trade depressions, as the result of events abroad over which we have no control.

Yet another fertile source of misunderstanding of the quantity theory is the misconception as to what constitutes the standard unit of value. It is pointed out by various authorities that the pound was originally a pound weight of silver, and it is maintained that the standard pound of to-day being, at full weight, 123·27447 grains of standard gold, i.e., gold eleven-twelfths fine, therefore the pound really represents that quantity of precious metal. It is important to remember, however, that the meaning of any word is that which the speaker or the writer intends to convey by it at the moment of speaking or writing. That being so, the meaning of the word "pound" will be what we intend to convey by it, and we can make the pound whatever we please.

Now it is necessary to distinguish between what the pound is and what it represents. The pound is sometimes a gold coin, sometimes a number of silver coins, sometimes a Treasury note, and sometimes a Bank of England note. In fact it may be represented in a great variety of ways. And a very little reflection will suffice to show that it is an error to suppose that the pound necessarily represents a certain quantity of gold merely because our gold

sovereigns contain that amount of the precious metal when at full weight. For when sovereigns are well worn they contain considerably less than the standard weight of gold, and yet they pass and are accepted as pounds at full value. The paper pound contains no gold, and at the present time will only purchase gold to the value of eighteen shillings, according to the old standard, and at one time it had fallen in value as low as fifteen shillings. Moreover, instances have been known of paper money rising above par, its value in gold rising above the value of the amount of the precious metal which it is supposed to represent.

The truth is that the pound is a token representing an ideal unit of value, and representing also just what it will buy. The pound represents what it is worth just as much as cowrie shells or wampum; and what it is worth is what it will buy. Thus if it will purchase 123·27447 grains of standard gold it certainly represents that quantity of gold, and it also represents an equivalent quantity of rice or potatoes. But when, as at the present time, it will not purchase gold to that amount it is absurd to say that it represents such a quantity. It represents just what it will purchase, and any quantity which it will purchase can be converted at any time into a definite fraction of the total national wealth. Thus if the quan-

tity of goods which the pound will purchase be one eighteen-thousand-millionth part of the total national wealth then this is equivalent to saying that the total value of the national wealth is eighteen thousand million pounds. And, conversely, if the total wealth of the nation be put at eighteen thousand million pounds, this is equivalent to saying that the pound represents one eighteen-thousand-millionth part of the national wealth. Thus any standard unit of value represents a certain fraction of the total wealth of the nation or community which uses it.<sup>1</sup>

It follows from the quantity theory that the greater the number of such units of value issued, whether in the form of coin, notes, or book credits, the smaller the value of the unit will be if the quantity of goods remains the same. This was the fact lost sight of by the kings of old when they debased the coinage. They failed to realise that in coining a larger number of units of value out of the same quantity of metal without increasing the quantity of goods available they necessarily reduced the amount of wealth represented by each unit. Perhaps had they coined the same number of units out of the debased metal and used the rest for purchases from abroad, they might

<sup>1</sup> In this connection see Kitson's works: *A Scientific Solution of the Money Question*, *A Fraudulent Standard*, etc.

have made a 'substantial profit,' in much the same way that a nation which organised a really scientific inconvertible paper currency would be able to spare a large quantity of gold no longer needed for the purposes of currency.

This is illustrated by the difference in the results of inflating a convertible and an inconvertible paper currency. In the latter case the value of the bank note falls below the value of the gold pound, prices rise, and the exchanges fall. If gold were then treated as a commodity pure and simple, that is about all that would happen until the public grew tired of constantly rising prices and a policy of deflation was initiated. But governments invariably make foolish attempts to keep the value of their depreciated paper at a par with gold. Thus during 1919-20 a traveller from Australia or New Zealand calling at an American port could change his gold sovereigns into American notes and, by changing these notes into English notes at Southampton, could make as much as 25s. 3d. for the sovereign, though in England the sovereign was only fetching as much as the pound note. The Government, having depreciated the pound note through excessive issues, and wishing to be perfectly consistent, proceeded to deliberately rob the owners of the commodity gold of part of the value of their property under the forms of law. This they

accomplished by refusing to take the gold sovereign at a higher rate than the pound note in payment of taxation even when it was worth as much as 25 per cent. more, and by forbidding all export and melting down. The result, of course, was to drive all gold out of circulation and to lead to large quantities of gold being smuggled abroad.

With a convertible currency the result of inflation is rather different. It is argued by the advocates of the "banking principle"—as opposed to the "currency principle" which assumes that the output of notes should be regulated by the quantity of gold available—that there can be no excessive issue of notes given the payment in gold on demand because any excess of notes will automatically flow back to the banks to be exchanged for gold. But "over-issue" in this connection is meaningless, since the effect of increased issues is merely to increase prices, and at the increased price level the increased issue is not excessive. It is not "over-issue," whatever that may mean, which produces financial crises, but a shortage of legal tender. Macleod, in his account of the various financial crises in the history of English banking,<sup>1</sup> has shown that the effect of restricting issues of notes during crises is merely to accentuate the evil and lead to disaster, whereas free issues of notes imme-

<sup>1</sup> *Theory and Practice of Banking.*

diately relieve the situation. If by "over-issue" is meant inflation, we know by experience that inflation is not prevented by either the currency principle or the banking principle.

Given inflation with a convertible currency the effect is to depreciate the value of gold in this country by raising prices, not only paper prices, but gold prices. This stimulates imports, checks exports, and turns the exchanges against us. This in turn puts a premium upon the export of gold, and the export of gold finally brings about a contraction of credit here with a fall in prices and, incidentally, commercial depression. All this illustrates the fact that the standard unit of value really represents, not a certain quantity of some commodity, such as gold, but a fraction of the total wealth of the nation which issues it and regulates the number of units. And the value of each unit, other things equal, will vary inversely as the number of units issued.

This latter fact contains the whole essence of the quantity theory, and it is doubly important to bear it in mind because of certain rather vague ideas that the purchasing power of the unit of value depends upon the amount of gold contained in it when in the form of coin. Thus Professor Irving Fisher says: "I do not think that any sane man, whether or not he accepts the theory of money which I accept, will deny that the weight of gold in a dollar has a great

deal to do with its purchasing power. More gold will buy more goods.”<sup>1</sup> Observe that Professor Fisher does not say that the amount of gold in a dollar determines its purchasing power, but that it has “a great deal to do with” determining the amount which the dollar will purchase. This is very ambiguous, and it is necessary to have perfectly clear ideas on the subject.

The full truth of the matter is that the amount of gold in the unit of value has nothing to do with its purchasing power except in so far as it determines the number of units which can be issued. Under the gold standard system the amount of gold in the unit of value together with the total amount of gold available will determine the maximum number of units of value which can be issued safely. The amount of gold available being equal then the larger the amount of gold in the unit of value the smaller the number of such units which can be issued, and the smaller the amount of gold in the unit the larger the number which can be issued. But even under the gold standard and with a fixed amount of gold in the unit the range of fluctuation of purchasing power is enormous, as can be seen from Sauerbeck's chart showing the course of average prices of general commodities in England during last century.

<sup>1</sup> *Stabilising the Dollar*, p. 90.



With an inconvertible paper currency the amount of gold in the coined unit has nothing to do with the purchasing power of the paper unit since it has nothing to do with determining how many of such units may be issued. Gold becomes a commodity merely and the coins are valued according to the amount of gold they contain if of greater value than the paper unit. The paper unit contains no gold, and its purchasing power is determined solely by the number issued, and this is determined by the discretion of the powers that be. If the number issued be sufficiently limited its purchasing power may rise above the purchasing power of the amount of gold in the standard coin.

Even with a convertible currency the purchasing power of the unit is determined by the number issued and not by the amount of gold in the coined unit. Professor Fisher points out that the Mexican dollar weighs only about half as much as the United States dollar, and, therefore, has less purchasing power. He adds: "If Mexico should adopt the same dollar that we have, no one could doubt that its purchasing power would rise about two-fold, that is, the price level in Mexico would fall about half. Likewise, if we should adopt the Mexican dollar, our prices would about double."<sup>1</sup> This would probably be the case, but not necessarily so.

<sup>1</sup> *Stabilising the Dollar*, pp. 90-1.

It would be possible to raise the purchasing power of the Mexican dollar higher than that of the United States dollar even under a convertible currency system, and even though all the dollars issued were of brass or paper and contained not a fraction of gold. It would only be necessary to raise the bank-rate sufficiently high and restrict credit until prices fell to the desired level. The number of units of currency issued determines the number of units into which the wealth of a nation is divided, and if the wealth of Mexico were divided up into a number of units sufficiently small, the value of each unit would be greater than the value of the gold in the United States dollar. This would be very similar to what happened when the paper currency of Brazil rose in purchasing power above the value of the gold in the Brazilian standard coin during the year 1889. In practice this does not happen under a convertible currency because the fall in prices puts up the purchasing power of gold with the result that gold flows into the country where this occurs and thus enables the bankers to issue a larger number of units of value, and it usually pays them to issue as much credit as possible. Inconvertible currencies, of course, generally suffer from excessive rather than from inadequate issues.

Money is said to have two functions: that of a medium of exchange and that of a

standard measure of values. But the best definition of currency is undoubtedly Mr Kitson's definition of it as the common denominator of values. Our standard measure of value is the common denominator of all values just as our standard measure of length, the yard, is the standard measure of all lengths, whether length of ground, of rope, or of calico. Money reduces potatoes and diamonds to a common denominator, so that a pound's worth or a dollar's worth of potatoes is equal to a pound's worth or a dollar's worth of diamonds, and thus a fair exchange can readily be effected between the most diverse and heterogeneous products. Thus it is because money is the common denominator of values that it is the medium of exchange, not because it contains a certain amount of gold. The gold is quite unnecessary for the purposes of money and was only adopted in the first instance because it was uniform in quality, comparatively indestructible, and limited in quantity. It thus made the best available common denominator of values in the days when a properly regulated currency had not been devised; but with the adoption of paper units and a scientific method of regulating their issue gold will become not merely unnecessary but a disastrous handicap.

## CHAPTER FOUR

### THE NATURE OF PURCHASING POWER

As the object of all trade, in the last analysis, is to exchange goods for goods, it would seem that the man who possesses a given quantity of goods also possesses an equivalent quantity of purchasing power. But this, under modern commercial conditions, is a complete fallacy. Under conditions of barter, indeed, the possessor of goods possessed equivalent purchasing power. The maker of boots could go to the maker of clothes and exchange a given number of pairs of boots for certain garments, or go to the baker and exchange his boots for bread. The maker of ploughs or saddlery could go to the farmer and barter them for corn, could get the miller to grind the corn in the same way, and the baker to convert it into bread.

But these proceedings are not merely difficult but absolutely impossible under modern commercial conditions. The manufacturer of thousands of pairs of boots per day could not possibly hawk them around in order to barter

them away for the necessities of life, even if he could pay his workmen in such commodities; while the men are too busy making boots to do any bartering themselves. In one town in the midlands, known to the writer, which is almost exclusively occupied with the manufacture of boots, the number of boots made in a single day is far in excess of the number required by the whole of the inhabitants in the course of a year, and it is manifestly impossible to get rid of them by barter. It is equally impossible for the cotton manufacturer, the clothing manufacturer, the farmer or any of those engaged in modern large-scale production to dispose of their products by barter. Goods, therefore, do not constitute purchasing power until they have first been converted into legal tender or its representatives.

It is for this reason that business men are often ruined and forced into liquidation when the value of their assets far exceeds the amount of their liabilities. They are caught, when trading largely upon borrowed money, with maturing obligations during a period of money tightness, and are unable to convert their goods into purchasing power except at a ruinous loss. The owner of money occupies a sort of central strategical position, commercially speaking, since he can readily convert his purchasing power into goods of any desired variety at almost any time.

Now purchasing power is a manufactured article, and its manufacturers are the bankers. A banker starts business with a certain amount of legal tender as capital, and he also receives legal tender as deposits from his customers. He receives securities also from his customers and upon the basis of legal tender and securities thus provided he manufactures a large supply of purchasing power or credit in the form of deposits upon which his customers operate by cheque. "The amount of legal tender retained by a bank with which to meet its liabilities to those who have purchased its credit is called its reserve. In Great Britain ordinary banks maintain a reserve equal to 25 per cent. of the liabilities. Viewed in another way this means that for every £100 of legal tender in its coffers the bank is prepared to lend, if it can do so on favourable terms and good security, £400 of its credit."<sup>1</sup> Thus bankers are manufacturers of purchasing power.

The amount of credit which can be safely issued on any given basis of legal tender is limited. It is true that most of a banker's business consists of transferring credits from one account to another, but every day large sums in legal tender are drawn out of the bank by cheque, and if a bank attempts to issue too much credit in proportion to its reserve of legal tender it will expose itself to disaster in the

<sup>1</sup> Sir Oswald Stoll, *The People's Credit*, pp. 40-1.

event of a financial crisis through being unable to meet its obligations.

Purchasing power, therefore, is limited in quantity by the amount of legal tender behind it. Although ultimately based or secured upon goods it is a thing quite distinct from goods, and goods do not constitute purchasing power until they have first been turned into legal tender or its representatives. The total amount of purchasing power is made up of legal tender multiplied by its velocity of circulation plus the amount of banker's credits multiplied by their velocity of circulation ( $MV + M'V'$ ).

## CHAPTER FIVE

### WHY PRICES FALL

WE are now in a position to grapple with the fundamental problem underlying the riddle of unemployment—the question as to the ultimate cause of those periodical slumps which result from falling prices. We have to ascertain the cause of the collapse of prices which always follows a boom.

Practically the whole of the world's purchasing power before the war was based upon gold. Now it is imperative to grasp clearly the fact that the amount of credit which can be based upon a given quantity of gold is strictly limited. Upon a given basis of gold it is possible to issue safely a given quantity of banknotes payable in gold on demand and no more. For, though most of a bank's customers are willing to take notes, there is always a proportion of customers who demand gold, and, given the necessity of payment in gold on demand, there is always the danger of being caught without an adequate supply of that metal, especially in times of crisis. As the amount of gold in the world



is a comparatively fixed quantity which can only be increased slowly, it follows that the amount of credit which can be issued throughout the world at any given time on a gold basis is a definitely limited quantity.

There is also a definite limit to the amount of credit which can be reared safely upon a given basis of legal tender banknotes or treasury notes, even if they are inconvertible. For, although most of a banker's business consists in transferring credits from one account to another, there is always a steady demand for legal tender in proportion to the amount of credit granted, so if too vast an edifice of credit be erected upon a given basis of legal tender the banker will soon find his reserves disappearing and himself unable to meet his obligations.

The great instrument for regulating credit is the bank-rate. This is the brake upon the economic wheel, and when credit begins to expand to a degree dangerous to the reserves of the banks the bank-rate is raised and this acts as a check upon borrowing. The higher the bank-rate the less the amount of business done, as the more the bankers charge for accommodation the fewer the borrowers will be.

We have two factors in the making of prices, the increase in the quantity of goods in the market and the increase in the quantity of

purchasing power issued. When the former increases more rapidly prices fall. When the latter increases more rapidly prices rise. A very low bank-rate, if the amount of legal tender available leaves an ample margin for credit expansion, leads to an output of credit greater than the expansion of the quantity of goods, causing prices to rise, and this disproportionate expansion of credit is known as "inflation." On the other hand a very high bank-rate checks the output of credit to such an extent that it fails to keep pace with the output of goods, with the result that prices fall. This process is known as "deflation." Obviously, if credit be based upon a definitely limited supply of gold, and if goods, during boom times, increase much more rapidly than the increase in the quantity of gold can keep pace with, then the final result of every boom must be an output of goods in excess of any possible output of credit, with the result that prices must fall. The same result must be produced even upon a basis of inconvertible banknotes unless provision is made for a steady addition to the notes in circulation to keep pace with the necessities of credit expansion, and such a provision has never yet been made.

Let us now suppose ourselves at the end of a slump, and the beginning of a boom period, bearing carefully in mind the fact that the

amount of credit which can be safely issued upon a given basis of legal tender is strictly limited. The preceding period of deflation has left an ample margin of legal tender available for the expansion of credit. Presently both business men and bankers begin to recover confidence, the cause of their recovery being the impression that the fall in prices has definitely ceased. The confidence of the bankers makes itself apparent in a lowering of the bank-rate which renders credit both plentiful and cheap. Traders, confident that an upward trend of prices has begun, begin to borrow money freely for business purposes, and a period of free buying sets in. Prices begin to rise and profits begin to rise also.

Confidence increases, and the bankers, who are very human, who understand very little about the nature of the forces they are playing with, and whose memories are no longer than those of other people, begin to catch the general infection. They, too, wish to make hay while the sun shines, they are competing for business, and the rush of borrowing which sets in receives no serious check from them at this stage. Credit expands rapidly, prices rise steadily, and profits with them. Business men become feverishly enterprising. This is a period of inflation, a boom, during which the expansion of credit is in excess of the increase in the output of goods.

But this cannot go on indefinitely, for we have already seen that the superstructure of credit which can be based upon a given amount of legal tender is strictly limited, whereas the possible increase in the output of goods is practically unlimited. As the economic wheel whirls more and more swiftly, as invention proceeds apace and better industrial organisation develops, the output of goods grow ever faster and faster. Credit can keep pace with it only for a time, and one fine day the bankers awaken to the fact that they have issued nearly all the credit which it is safe to issue upon the basis of legal tender available. Money is getting "tight." Our currency system makes no provision for an increase in the amount of legal tender in proportion to the increase in the output of goods. Therefore the bankers must check the issue of further credit, and that quickly.

The bank-rate is raised; but it so happens that at just about the time when credit is getting exhausted the economic wheel is attaining its highest speed and throwing off goods at a greater pace than ever. The demand for credit grows more insistent, but the bankers now feel their position becoming dangerous. Money is now very "tight," and if they increase their issues they will be in danger of not being able to meet their obligations. So the bank-rate is forced up and up in order to save the

bankers from disaster. Loans are called in to strengthen reserves. The brake is jammed on hard when the economic wheel is whirling at full speed. The result is a sudden contraction of credit. Prices fall with disastrous swiftness. Everybody stops buying and endeavours to sell. Business men, trading largely upon borrowed money and unable to renew their loans, are forced to economise in every possible way and to sell at ruinous prices in order to meet their obligations. Many of them become bankrupt. Hands are dismissed wholesale, and the cry of the unemployed is heard in the land. Prices fall more and more. Yet more people become unemployed. Purchasing power steadily contracts. Commercial confusion and black disaster reign, more deadly than war and pestilence, where but a few weeks before all had been hope, confidence, and prosperity.

Professor Irving Fisher describes the upward cycle of events this way<sup>1</sup> :—

- (1) Prices rise.
- (2) The rate of interest rises, but not sufficiently.
- (3) Enterprisers (to use Professor Fetter's term), encouraged by large profits, expand their loans.
- (4) Deposit currency (M') expands relatively to money (M).

<sup>1</sup> *The Purchasing Power of Money.*

- (5) Prices continue to rise; that is, phenomenon No. 1 is repeated, and so on.

And when the inevitable crisis comes the same authority describes the results as follows:—

- (1) Prices fall.
- (2) Velocities of circulation ( $V$  and  $V'$ ) fall; the rate of interest falls, but not sufficiently.
- (3) Profits decrease; loans decrease.
- (4) Deposit currency ( $M'$ ) contracts relatively to money ( $M$ ).
- (5) Prices continue to fall; that is, phenomenon No. 1 is repeated. Then No. 2. is repeated, and so on.

Thus the whole disastrous sequence is traceable to the fact that our currency system makes no provision for the expansion of credit in proportion to the increase in the output of goods. For if there be payment of gold on demand the issues of credit are strictly limited by the amount of gold available, and the quantity increases but slowly. While if paper money be inconvertible no provision is made for an increase in quantity proportional to the increase in the output of goods, and the amount of credit which can be based upon a given

quantity is limited. But there is no limit to the possible increase in the output of goods, and when this exceeds the output of credit prices must fall, with disastrous consequences.

The course of events described above represents what might be called the architypal scheme—it is what would occur if events pursued a normal course and were carried to their full logical development. But each crisis has its own peculiar features, and the student would do well to follow the course of the various crises in English commercial history as described in Macleod's *Theory and Practice of Banking*, and in this he will find Sauerbeck's chart showing "The Course of Average Prices of General Commodities in England" of immense service.

The latter document might have been drawn up to illustrate the views expounded in this work. Time after time prices rise under the influence of expanding credit until they reach the culminating point, under which is printed the word "crisis," and then comes the downward slope which follows the contraction of credit, and underneath which is printed the word "depression." When the crisis does not exactly coincide with the peak of prices it is always close to it, and this, of course, merely means that some disturbing factors have modified the development of events.

A feature well worth special notice is the long

downward slope of prices which follows the demonetisation of silver in America, France, and Germany in 1873. "Demonetisation" does not mean that silver was no longer used as money, but, that, being no longer legal tender, it could not be safely used as a basis for credit production. Thus not only did the great mass of silver already produced cease to be available as a basis of credit for the greater part of the commercial world, but the large annual output of silver was also eliminated for that purpose. As a consequence, for many years the output of credit throughout the world was less in proportion than the increase in the output of goods, with the result that prices steadily fell. This continued until the discovery of the cyanide process of extraction in the early nineties rendered it possible to work low grade gold ores profitably when there followed a great development in the output of gold, and from then up to the outbreak of the Great War the general trend of prices was steadily upward.

Although it is generally admitted that the ideal currency system is one which will maintain a uniform level of average prices the line staggers up and down across the chart like the track of a drunken fly, providing an apt and ironic commentary upon that much-boasted "soundness" of a currency system based upon the payment of gold on demand. But the



principles outlined in this work are admirably illustrated. After the close of the Napoleonic wars a long period of deflation ensued until 1821 when gold payments were resumed by the Bank of England. In 1822 commenced a period of inflation culminating in the great crisis of 1825. During the year 1824 and the earlier months of 1825 there was an outbreak of speculative mania which the banks did nothing to check. For months the Bank of England recklessly increased its issues when it should have checked speculation by raising the bank-rate, although its Directors were well aware that vast quantities of gold were being drawn out to send abroad. Then in May, 1825, when the mischief had run to disastrous lengths, it reversed its policy, raised the bank-rate, brought on a violent contraction of credit, and precipitated a crisis. There were gigantic failures of businesses and banks all over the country and a slump in prices. The situation was finally relieved by the Bank of England again reversing its policy, after the high bank-rate had caused an inflow of gold from abroad, and making liberal issues of notes. This stayed the panic and saved the situation. Thus we get the period of expansion, which ought never to be allowed, resulting in a tightness of money and inevitably followed by a contraction of credit, a fall in prices, and commercial disaster, the situation only being relieved when the banks

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are again in a position to provide an adequate supply of legal tender.

After the crisis of 1825 came the usual period of apprehension and depression with a continued fall in prices until 1832. From that year until 1835 prices were comparatively steady, and it is interesting to note that it was a period of great commercial prosperity, thus suggesting that stability of prices provides the best incentive to trade. But in 1835 commenced another outbreak of speculation which followed the usual course. Credit was allowed to expand without check, and prices rose rapidly until 1836, when the Bank of England awoke once more to a sense of its danger. Then came the forcing up of the bank-rate, the contraction of credit, the collapse of prices, the panic, the slump in trade, the failures, and, finally, the relieving of the situation by the extension of liberal assistance in various quarters by the Bank of England.

And so the commercial history of England down to 1866 may be read in Macleod through crisis after crisis, all differing in detail, all alike in principle, and all unnecessary. Sometimes the incentive to expansion is given by a foreign war causing an increased demand for commodities and an outbreak of speculation, sometimes it is the building of railways, sometimes something else. Sometimes the crisis is precipitated by the tightness of money resulting

from the drain of gold abroad—a process which our monetary system seems expressly designed to facilitate—causing a panic through dread of the banks being unable to meet their obligations. Sometimes the impulse comes from trouble abroad, as when the crisis of 1857 was precipitated by a collapse of credit in America causing a vast fall in the value of American securities held in this country and a disastrous contraction of credit here, again illustrating the folly of a system which makes our credit facilities dependent upon the course of events in other countries. Always the details differ, but always the principles involved are the same. That the same cycle can be passed through again and again and neither bankers nor economists realise the significance of the events passing before their eyes seems to be the result of the fixed idea that the decline in prices is due to the slump instead of the slump being due to the fall in prices. The persistence of this illusion is rendered possible by the fact that the slump which is initiated by a decline in prices resulting from a contraction of credit immediately reacts upon prices by reducing the rate of circulation of money and produces a further fall.

The most remarkable feature about all these crises is the ease with which the trouble is overcome as soon as the powers that be can be persuaded to apply a little elementary

common sense to the situation. Nothing more is ever required than to provide a supply of legal tender bearing some reasonable proportion to the needs of commerce, and the crisis vanishes like an evil dream, though many serious after effects necessarily persist, including shattered confidence and depression. The panics of 1697 and 1794 were stayed by the issue of Exchequer Bills. After the passage of Peel's Bank Charter Act—which, by the way, was expressly designed to avoid crises by putting our currency and banking systems on a "sound" footing—the usual way of meeting crises was to suspend that masterpiece of legislation and allow the Bank of England to issue currency in excess of the amount prescribed by law. This action was taken by the Government, for instance, during the panic of 1847, and "Mr Gurney stated that it produced its effect in ten minutes! No sooner was it known that notes *might* be had than the want of them ceased!"<sup>1</sup> In much the same way we see a decided improvement in trade and employment following immediately upon the action of the Bank of England in lowering the bank-rate during the earlier months of this year, thus illustrating how simple are the principles involved and how easily all the mischief and misery of commercial crises and unemployment

<sup>1</sup> Macleod, *Theory and Practice of Banking*, Vol. ii., p. 171.

might be avoided. The only apparent exceptions in Sauerbeck's chart to the rule that rising prices are accompanied by activity and falling prices by depression is provided by the years 1858-60, where the line takes a marked upward slope but under which the word "depression" is printed. Macleod mentions that the bank-rate during this period was "generally moderate," and this would account for the rise in prices; but it is very difficult to reconcile a rise in prices with depression, especially as there is no mention of bad harvests or causes of that character. A rise in prices indicates an expansion of purchasing power relatively to the production of goods, and it is difficult to see how an increase of purchasing power so marked as to cause a substantial rise in prices can be consistent with continued depression. But, of course, depression is always a matter of degree, and as there was a serious crisis in 1857 followed by a big slump in prices, it is possible that the rise in prices which followed merely marked a period of recovery which was not sufficiently pronounced or of sufficient duration to completely overcome the tendency to depression.

In these latter days crises have ceased to be so severe and are rarely accompanied by panics, mainly, no doubt, owing to the more stable character of our banking system, the greater resources of the banks, and greater care in the

matter of reserves. But the principles involved remain exactly the same although the superficial phenomena differ. We still get the periods of inflation, although tightness of money is not allowed to go to such extreme lengths. The period of inflation is still followed by a raised bank-rate, a period of deflation, and a slump. Business men are still ruined on a wholesale scale through being led to purchase heavily during boom times and then being caught by money tightness, financial contraction, and a slump in prices which compel them to sacrifice their stocks at a ruinous loss in order to meet their obligations.

The present depression probably differs from most other crises in not having been brought on by an actual tightness of money. After the war paper money was issued in a very reckless fashion and the bankers issued credit on a correspondingly lavish scale. Owing to the extravagant issues of Treasury notes there was probably an ample margin still left for further expansion even when it was decided to deflate. But inflation had forced up prices to such a height as to exasperate the country and alarm the Government. It was decided to reverse the process on the principle, apparently, of correcting one blunder by means of another. The bank-rate was forced up as high as seven per cent., and it proved its efficacy as a regulator of prices by bringing them down with a run.

Then everybody stopped buying and we soon had an army of unemployed numbering over two millions; but the authorities, serenely conscious that the epidemic of unemployment arose through no fault of theirs, have been looking for the cause ever since in the state of affairs in Russia, Czecho Slovakia, Timbuctu, and similar likely places.

## CHAPTER SIX

### THE MEANING OF "OVER-PRODUCTION"

WE are now in a position to understand the exact meaning of the phenomenon known as "over-production," a state of affairs under which men are forced to go hungry, ill-clothed, and ill-shod because they have produced too much food, too much clothing, and too many boots, a state of affairs under which men starve amidst the superabundance of riches which they have themselves created. It means simply that credit is no longer being issued on a scale corresponding to the output of goods with the result that prices fall. This causes a general suspension of buying and enterprise with the result that hundreds of thousands or even millions of people become unemployed. There is a general contraction of purchasing power, and thousands of people starve in the midst of abundant wealth which lies rotting in the warehouses because they are not supplied with the money with which to purchase it and set the economic wheel in efficient motion. They



cannot buy because an adequate supply of purchasing power has not been distributed among them.

The banks are partly to blame for an excessive issue of purchasing power in the first instance, which exhausts the available supply more rapidly than would otherwise have been the case; but the greater part of the responsibility lies with our inelastic and unscientific currency system. "The banks are forced in self-defence to raise interest because they cannot stand so abnormal an expansion of loans relatively to reserves. As soon as the interest rate becomes adjusted borrowers can no longer hope to make great profits, and the demand for loans ceases to expand.

"There are also other forces placing a limitation on further expansion of deposit currency and introducing a tendency to contraction. Not only is the amount of deposit currency limited both by law and by prudence to a certain maximum multiple of the amount of bank reserves, but the bank reserves are themselves limited by the amount of money available for use as reserves. Further, with the rise of interest, the value of certain collateral securities, such as bonds, on the basis of which loans are made, begins to fall. Such securities, being worth the discounted value of fixed sums, fall as interest rises; and therefore they cannot be used as collateral for loans as large as

before. This check to loans is, as previously explained, a check to deposits also.

"With the rise of interest, those who have counted on renewing their loans at the former rates and for the former amounts are unable to do so. It follows that some of them are destined to fail. The failure (or prospect of failure) of firms that have borrowed heavily from banks induces fear on the part of many depositors that the banks will not be able to realise on these loans. Hence the banks themselves fall under suspicion, and for this reason depositors demand cash. Then occur 'runs on the banks,' which deplete the bank reserves at the very moment when they are most needed. Being short of reserves the banks have to curtail their loans. It is then that the rate of interest rises to a panic figure. Those enterprisers who are caught *must* have currency to liquidate their obligations, and to get it are willing to pay high interest. Some of them are destined to become bankrupt, and, with their failure, the demand for loans is correspondingly reduced. This culmination of an upward price movement is called a crisis, a condition characterised by bankruptcies, and the bankruptcies being due to a lack of cash when it is most needed."<sup>1</sup>

Thus the meaning of "over-production" is perfectly clear. It is due to an output of pur-

<sup>1</sup> *Theory and Practice of Banking*, Vol. ii., pp. 64-6.

chasing power inadequate to keep pace with the output of goods. And this, as the above analysis by Professor Irving Fisher clearly shows, is the absolutely inevitable result of our present currency system or lack of system. No provision whatever is made in our present currency arrangements for an expansion of purchasing power which shall proceed in close proportion to the expansion in the output of goods, as, under the influence of growing confidence, enterprise, and invention, the whirling economic wheel throws off ever-increasing quantities of goods. When the limit of credit expansion possible upon the available supplies of legal tender is reached there is no provision for further expansion with the result that prices fall, confidence collapses, and everyone ceases to buy. Millions become unemployed and starvation ensues in the midst of plenty.

Oddly enough, Professor Irving Fisher, whose analysis provides so crushing a condemnation of our present currency system, is an advocate of what he calls "sound money," meaning thereby the gold standard system which he has so drastically exposed, showing that it is the direct cause of those slumps which periodically overwhelm us with disaster, and that they are its inevitable and predictable results. If this is "sound" money surely the sooner we arrange for an "unsound" system the better for everyone. But it is fair to mention

that Professor Fisher recognises that the "unsound" system may be the ideal system given certain conditions, and also advocates a modification of the gold standard system designed to secure stability of prices.

The greatest obstacle to all methods of scientific organisation designed to increase output is undoubtedly the fear on the part of the workers that this will lead to "over-production" and consequent unemployment. Under a sanely organised credit and currency system such a fear would, of course, be absurd, for if purchasing power were issued in a direct ratio to the production of goods then every increase of production would be accompanied by a corresponding increase of buying so that society would have no difficulty in absorbing all the goods produced.

While there have been occasional local gluts of particular commodities, there has never been a time in the history of the world when any primary commodity has been produced in quantities exceeding the needs of the world. Given adequate transport facilities and a scientifically organised distributive system a local glut of goods in any one place need never occur since there is all the world in which to distribute them, and excess in one locality is invariably accompanied by scarcity elsewhere. A good illustration of the fallacious ideas prevailing in regard to "over-production" causing unemployment is

provided by the sale of surplus stores immediately after the war. For instance, the British Government had some seven million pairs of boots to dispose of after demobilization, and this is held to have been a powerful contributory cause of unemployment in the boot manufacturing industry. But there are over 45 million people in these islands and that number of boots would provide less than one-sixth of a pair of boots per head, a quantity which should surely have been absorbed with the utmost ease. Moreover these boots were mostly heavy boots and, consequently, only affected one section of the trade, yet every section was badly hit by the epidemic of unemployment. Add to this that there was a great shortage of boots immediately following the war, in comparison with which the surplus Government stores constituted a mere drop in the ocean, and it will readily be seen how little they can have affected the position. Under a healthily organised economic system all surplus war stores would have been absorbed without effort since the war was followed by a great scarcity in nearly all lines of goods.

There need be no fear whatever of producing more than can be absorbed if credit be issued in a proportion corresponding to the production of goods, for, even supposing the needs of society to be satiated in some directions, it will be easy to meet this by working shorter hours. And there are always vast spheres into which

surplus labour can be turned. Thus, assuming the housing needs of the population to be caught up with by the building trade, yet there is unlimited scope in the production of public buildings and public works of all descriptions. We could make every city a garden city, and ornament every town with architecture rivalling the best efforts of ancient Rome and Greece.

The danger of "over-production" under our present credit and currency system is no mere bogey, however, but a very real thing. Indeed the system seems expressly designed to ensure such a result. So long as our issues of purchasing power are limited by the quantity of gold in the world it is absolutely certain that when the economic machine begins to run at high speed the output of goods will soon outstrip the output of purchasing power, and then will come a contraction of credit, a fall in prices, and a slump in trade. There is bound to be an over-production of goods in proportion to the production of credit. So the fear of "over-production" on the part of the workers is by no means baseless. It is fully justified under our present system both in theory and in practice and it will only cease to be justified when that system is reformed.

It is necessary, however, to have perfectly clear ideas on this subject. Thus Mr A. R. Orage, in *An Alphabet of Economics*, says that "over-production means that we can and

occasionally do, produce more of this and that commodity than people in general can afford, or have the spending power to buy or effectively demand."<sup>1</sup> This is not quite correct and the fallacy underlying it is that which underlies all schemes for remedying unemployment by inflating our issues of paper money. The amount of currency in the hands of the people is *at all times* sufficient to buy any quantity of commodities which can be produced. It is merely a question of price. If the output of purchasing power fails to keep pace with the output of goods prices fall, and the currency available is still sufficient to buy them. But it is just this fall in prices which leads to the phenomena collectively known as "over-production" because it compels people to stop buying, otherwise they lose heavily and run the risk of ruin. All business enterprise is killed by falling prices. It is of no use attempting to define over-production because, in the literal sense, it does not exist; but we can say that the phenomenon *known as* "over-production" results from an output of goods in excess of the output of purchasing power, with the result that prices fall and people cease to buy.

In the little work called *The Facts of the Case*, compiled for the Economic Study Club by the Editor of *Industrial Peace*, the above

<sup>1</sup> Quoted from *The Facts of the Case*.

definition by Mr Orage is accepted, but it is objected that:—

1. Increased production does not necessarily lead to over-production.

The answer is that under a scientifically organised credit and currency system increased production would not and could not lead to "over-production," but that under our present system it not only *does* but *must* lead to "over-production" when the economic machinery begins to run at full speed.

2. Over-production is the result, not of increased production, but of production for which there is no demand—i.e., production which no one can, or no one wants to buy.

The answer is that "over-production" is the result of increased production of goods which is not accompanied by a proportional increased issue of purchasing power. Indeed at the time of the usual financial crisis there is a rapidly increasing output of goods which is accompanied, not by an increase, but by a decrease in the issues of purchasing power, which results in a violent contraction of credit and a corresponding fall in prices. There is very little production of goods which "no one wants to buy," and such production is probably most active when trade is at its best and least in evidence during times of depression. The production of goods which "no one can" buy



results from the fall in prices which prevents them from buying.

3. So long as increased output means higher wages, there is a greater demand and, therefore, a greater consumption of goods.

But this is merely a picture of what would take place under a scientifically organised credit and currency system, and which cannot work out effectively under our present system. Unless the increased output of goods is accompanied by an increased issue of purchasing power there cannot be increased wages and a greater consumption of goods. Wages have to adapt themselves to the amount of purchasing power issued, as we have seen in the general fall in wages which followed the recent contraction of credit and fall in prices. If this additional credit is not issued increased production can only result in falling prices and all the phenomena known as "over-production."

4. Increased consumption demands increased output and there is no over-production.

The answer is that "over-production" is but too obvious and palpable a fact which is not to be got rid of by merely denying its existence, although it is admittedly misinterpreted. Increased consumption is dependent upon the provision of an adequate supply of purchasing power.

5. The remedy for over-production is to produce the right things and to distribute them

rightly. The volume of production has never yet been nearly great enough.

The latter proposition is true so far as the needs of the people are concerned. To the former proposition it is only necessary to reply that given the distribution of an adequate supply of purchasing power people will buy freely and themselves ensure the production of the right kind of goods by ordering what they require. As to the right distribution, it may be pointed out that stable prices would enable us to adjust wages by a simple system of costing and in such a way as to place a premium upon increased output.

6. The individual cases which must arise unless organisation is perfect, should be met by a comprehensive system of insurance, or a revised system of labour payment.

But until we obtain a scientific credit and currency system and stability of prices we shall continue to have these vast periodical epidemics of unemployment for which unemployment insurance, although it may serve as a palliative, is no remedy. When we do get a scientific credit and currency system, however, these epidemics will cease at once, and we shall be able to deal quite easily with the residue of unemployment by organisation, technical and practical training, and unemployment insurance.

Other propositions from the same source are

that "low cost of production means large markets abroad, large imports and lower prices," and that "lower prices means that the worker can buy more and buy a greater variety of things." We have seen that falling prices paralyse trade, but it is doubtful if the lowering of prices which comes of reduced cost of production would have that effect, since the firm which lowers prices from that cause is enabled to do so without seriously impairing its profits, and, consequently, such a lowering need not check buying because there is no danger of a loss being incurred. Nevertheless, in the interests of the general stability of prices it would probably be better that the worker should take his share of increased production in the form of increased wages than in the form of lower prices. This would mean an output of credit in proportion to the increased output of goods which had reduced the cost of production, while competitive power abroad would be in no way affected because all this would be balanced up by the exchanges. Lower prices mean dearer paper. Higher prices mean cheaper paper. Consequently lower wages with lower prices represent just as high a cost of production as higher wages with higher prices when everything is translated into international currency.

I have dealt with these points in detail because they are excellent examples of the

half truths which are continually uttered about these problems, and which, because they are partly true, but, neither fully thought out nor accurately expressed, are apt to be misleading and confusing.

## CHAPTER SEVEN

### THE OUTPUT OF GOLD

It might be urged against the view that trade slumps are the result of the inelasticity of our currency system leading to an inevitable contraction of credit as the result of every boom, that ever since the discovery of the cyanide process of extraction the increase in the amount of gold has been at a greater rate than the increase in the output of goods, with the result that 'prices have been steadily rising for over a quarter of a century. The facts are undoubtedly as stated, but they do not constitute an argument against the analysis of the cause of crises given in the preceding chapters.

Possibly, had our output of credit been intelligently regulated, the steady increase in the amount of gold available might have enabled us to avoid financial crises and slumps; but that is very doubtful. We must remember that our economic machinery practically never runs at full speed and efficiency even in the midst of a boom. It is probable that if the economic machine were to gather way and

steadily increase its efficiency, as would be possible under a scientifically designed currency system, the increase in the output of goods would rapidly exceed the increase in the amount of gold available.

But whenever our economic machinery does begin to get up speed and we experience what is called a boom, a slump always follows close behind, and the reasons are obvious enough. The steady increase in the amount of gold available is never made intelligent use of. When trade begins to boom the bankers, catching the infection, competing for business, and understanding little of economic laws, begin to extend credit far too freely, and the expansion of both credit and goods for a time is far in excess of the increase in the amount of gold available. This goes on until money begins to grow tight, and then comes the inevitable contraction of credit and a slump. Prices fall, but they do not fall so low as before the boom.

The period of stagnation drags itself along. When about every business man has been ruined that can be ruined and the workers have begun to despair it begins to appear that prices have reached bottom. Confidence revives, and those who have purchasing power begin to buy again. Gradually confidence is re-established and the upward trend of prices begins. After a long period of gradual

recovery the boom commences again. Once again the bankers, having no conception of an intelligent use of the bank-rate, begin to extend credit too freely. Again inflation commences and runs its course until money grows tight once more, producing the inevitable contraction and a disastrous slump. Prices fall heavily, but again they do not fall so low as before the boom. After each successive boom the price level is higher. The increase of prices resembles, in its ebb and flow, the advance of the tide up the beach, each succeeding level reached being higher than before.

The fact that an increasing supply of gold or even an inconvertible paper currency is no guarantee against money tightness and slumps unless it is intelligently used is illustrated by what happened after the war. We had then an inconvertible currency which could be expanded to any extent. Unfortunately the powers that be did not know how to use it. They issued Treasury notes to a quite excessive amount and the banks extended credit accordingly. Prices rose to unprecedented heights in consequence, and then the "experts" decided to deflate. The results were seen in over two million people unemployed, an enormously shrunken revenue, and a national debt increased by about 25 per cent. in real weight.

Had the original inflation not occurred the subsequent deflation, with its disastrous conse-

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quences, would have been unnecessary. It is pure sophistry to say that the inflation was necessary as a basis for the huge loans required for the purposes of the war. Some expansion of credit was certainly necessary, but it should have been carefully limited, and most of the inflation took place after the conclusion of peace when the bulk of the borrowing was over. Inflation raises prices, and the more money issued in excess of what is required to maintain prices at a given level the greater will be the necessity for loans. The policy of issuing paper money for revenue purposes is the policy of the Mad Hatter. When a Finance Minister issues paper money to stop a gap in his budget he causes a rise in prices. This increases the expense of government with the result that the gap becomes bigger than ever. A further issue with the object of stopping the new gap further increases prices and the expenses of the Government, and again the gap grows. This is a process somewhat resembling opium smoking. Each successive dose necessitates a larger dose to undo the effects of the reaction, and the downhill process never stops. We have seen this Rake's Progress exemplified in Germany, Russia, Austria, and other countries, and still the game of endeavouring to stop the gap by a method which increases it is persisted in. The same objection is to be urged against an excessive issue of paper for the purpose of



loans since the more the paper the higher the prices and, consequently, the greater the demand for loans.

No useful purpose is served by an issue of credit in excess of the output of goods, as it merely raises prices and leads to contraction later. We are paying heavily now for this cycle of blunders, and it would be gratifying if there were some signs that the lesson had been learned. But it was recently announced by Sir Robert Horne in the House of Commons that the Government propose to re-establish gold payments as soon as the state of the foreign exchanges renders it possible. This means that it is proposed to begin again the disastrous round of inflation and boom, deflation and slump.



## CHAPTER EIGHT

### THE EVIL OF INFLATION

WITH curious inconsistency Mr Kitson, while demanding an invariable unit of value, which means maintaining the same average level of prices, also defends inflation,<sup>1</sup> which means a cheapening of the currency by reducing its purchasing power, or higher prices. He seems to have been led into this by the example of Germany where an inflation of the currency has maintained trade prosperity during the period when deflation has produced a disastrous slump in this country and the United States.

It is undoubtedly true that rising prices give a fillip to industry. "We all hasten to get rid of any commodity which, like fruit, is spoiling on our hands. Money is no exception; when it is depreciating holders will get rid of it as fast as possible. As they view it their motive is to buy goods which appreciate in terms of

<sup>1</sup> See *Unemployment*, pp. 35 *et seq.* Mr Kitson explains that he merely regards inflation as a lesser evil than deflation.

money in order to profit by the rise in their value."<sup>1</sup> Just as surely as all classes stop buying when prices are falling, do all classes buy freely when prices are rising. It does not matter whether the buying is for speculation or for use. In the former case there is the prospect of profit later on. In the latter case to purchase at once is to buy more cheaply than will be possible later. Thus it comes about that rising prices produce prosperity, as we see in Germany which, having been defeated, offers the singular spectacle of greater prosperity and a far smaller proportion of unemployed than the countries that won. Incidentally, the same policy of inflation has reduced the real weight of the German debt to an almost negligible quantity, while the opposite policy of deflation has increased the real weight of our debt by about 25 per cent.

It is no reply to this to point to countries like Russia and Austria which, in spite of an enormously inflated currency, are in a disastrous state commercially. Their troubles are mainly due to causes which rising prices cannot remedy. Thus Russia has been ruined commercially by the blundering of communist fanatics. Her transport system has been crippled by the war, and the troubles that followed. Vast areas have been devastated by civil war and famine. Austria has also been

<sup>1</sup> *The Purchasing Power of Money*, p. 63, Irving Fisher.

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paralysed by political troubles of a very similar character.

Nevertheless, in spite of the fact that inflation undoubtedly brings prosperity for the time being, we do not want it. The state of affairs thus created is artificial and temporary. It is just these periods of inflation which are the cause of deflation, with its attendant disasters, later on. It is impossible for prices to go on rising for ever. Sooner or later inflation must be followed by deflation. As shown in the preceding chapter, had it not been for the policy of reckless inflation which followed the war we should not have had a long and disastrous period of deflation now.

What we need is neither inflation nor deflation, but just such an expansion of credit as will keep pace with the expansion in the output of goods. That should afford a sufficient stimulus to production, while to ensure consumption an adequate distribution of purchasing power is all that is necessary.

It is doubtful if there is any advantage, even from the point of view of stimulating output, in rising prices. A rise in prices means that the output of credit or purchasing power is in excess of the output of goods, and it also means that more purchasers are bidding for the goods than can be properly supplied at the moment, which is a very dubious advantage. Suppose that a dozen business men propose to build as many

factories, and that only sufficient materials for half a dozen are available at present. If they all start to build together, bid against each other for the available materials, and spread them out over a dozen factories nothing but delay in increasing production can result. It would be far better to build the factories in pairs and get the first pair nearly finished before beginning on the second pair, for in this way the first half-dozen factories would be finished and in full operation by the time the second half-dozen were well under way. In the same way, given the materials available for fifty cottages it would be far more expeditious to confine building within the limits of available materials than to attempt to spread them out over a hundred cottages. Now steady prices mean that the output of materials is keeping pace with the output of credit, whereas rising prices mean that the output of credit is running ahead with the result that there are more ventures in hand than the materials available are adequate for, and the result is more likely to be a delay than an acceleration of output.

Rising prices by no means stimulate trade and enterprise in every case. Take the case of a large contract extending over a number of years, during an era of rising prices, which is to be carried out by private capital. Either the contractor must risk being ruined by a rise in

the cost of materials while the work is under way, which would sweep away all prospect of profit and saddle him with a heavy loss, or he must insist upon a clause in the contract guaranteeing him against loss from rising prices. But before shareholders risk their money in such enterprises they naturally wish to know exactly what it will cost them, and such a clause transfers the risk of loss from the contractor to themselves. They may find, if they pursue the undertaking, that a rise in the cost of materials has upset their calculations by the time the work is completed, and eliminated all hope of the venture ever being a profitable one. During periods of rising prices many a promising enterprise must be abandoned because of the impossibility of knowing beforehand what the ultimate cost will be. So rising prices are a far less healthy and effective stimulus to enterprise, as distinct from speculation, than a confidence in the stability of prices would be.

Steady prices, a ready sale, and an assured profit will offer all the incentive that is necessary to speed up the economic machine to any desired capacity. The knowledge that no slump, with its danger of ruin, lies ahead will more than offset the absence of the gambling element and the feverish desire to rake in the maximum amount of profit before the next slump comes along. Confidence is a better stimulus

than temptation. Indeed, one of the greatest advantages of a fixed level of prices is that it will offer the maximum inducement to legitimate enterprise and the minimum inducement to mere speculation and gambling.

## CHAPTER NINE

### THE IDEAL CURRENCY SYSTEM

SINCE our present currency system, upon the showing of its own advocates, is so designed as to ensure a catastrophe whenever the economic machine begins to work at full speed, it is clear that there can be no hope of solving the problem of unemployment until we devise a different and sounder system. It is generally admitted, even by the advocates of "sound" money, that the ideal currency system is one which will maintain a uniform level of average prices. The reasons for this are obvious enough, for it has already been shown that falling prices are the chief cause of unemployment and the failure of our economic machinery to run at full speed; while rising prices are equally undesirable because the rise cannot continue for ever and inflation must necessarily be followed, sooner or later, by deflation and a slump.

The ideal system, then, will provide for a steady expansion of our currency at a ratio corresponding as exactly as possible to the



expansion of our output of goods. There need be neither booms nor slumps then ; and we shall be able to drive the economic machine at a uniform speed, that speed being just what we like to make it. Even the High Priests of finance are beginning to recognise that what is conventionally called " sound " money is by no means ideal money, and that a more elastic system is to be desired. Thus Mr F. E. Goodenough, Chairman of Barclay's Bank, in his address at the Twenty-seventh Ordinary General Meeting, January 25th, 1922, pointed out that " what is really needed to-day is both an ability and a readiness to expand for productive purposes under sound economic conditions. For this we require a currency which is both capable of elasticity and is sound and one that has a definite relation to value. It should be capable of expansion and contraction, and in addition there should be such elasticity of credit as will enable us to meet the needs of productive enterprise." No sane man with the most rudimentary grasp of financial principles now attempts to dispute these propositions, but there is still a conservative clinging to a disastrously unsound system which is conventionally labelled " sound " for no other reason than that we are used to it.

Now it is fair to say that the man who has done most to demonstrate what are the conditions essential to the establishment of the ideal

currency is Mr Arthur Kitson in his works *The Money Problem, A Fraudulent Standard*, etc. He has shown that the ideal unit of value must represent some definite fraction of the wealth of the community which issues it at some particular time, and that the number of such units must expand or contract in exact proportion to the expansion or contraction of the national wealth. Thus if our national wealth be estimated at any given date at £18,000,000,000, then the pound is simply one eighteen-thousand-millionth part of that wealth. And if our wealth, measured in quantities of goods, increases by 50 per cent. then it should be valued at £27,000,000,000 and the unit of value will be one twenty-seven-thousand-millionth part of the national wealth. This can only be achieved by issuing 50 per cent. more purchasing power or 50 per cent. more of these currency units. For if we issue only the same number of currency units then each of these units will rise 50 per cent. in purchasing power with a corresponding up-setting of all values. Money has been well defined by Kitson as the common denominator of values, but under our present aimless and chaotic arrangements the unit of value fluctuates enormously in purchasing power; and our national wealth may remain nominally almost stationary while really increasing enormously, or apparently increase enormously while really

diminishing, according to whether we pursue a policy of inflation or deflation.

Mr Kitson has further shown that we can achieve the desired end of stabilising permanently the unit of value only by means of an inconvertible paper currency, and never by means of a currency based on the payment of gold on demand. The reason for this has already been made clear. Gold provides an inelastic basis. The quantity of it available increases but slowly, and, practically speaking, cannot be diminished at will. The amount of legal tender and credit which can be issued upon a given quantity of gold is strictly limited, whereas the possible increase in the output of goods is unlimited. So if our economic machinery ever runs at full speed it will ultimately produce an increase in the output of goods which cannot be met by a corresponding output of credit. Then will inevitably come a contraction of credit, falling prices, and commercial disaster. Moreover, under our present system of a free gold market, the amount of gold in this country may at any time be diminished by export with a resulting contraction of credit here which it is beyond our power to prevent.

There is no need to enter into elaborate arguments as to the practicability of an inconvertible paper currency. It will suffice to point out that so long as it is made legal tender, is

accepted by the Government in payment of taxes, and is not over-issued, an inconvertible paper currency provides the ideal currency which can be expanded or contracted to any desired extent at will. Over-issue is the only real danger and drawback. This is admitted by Professor Irving Fisher, who says: "It is true that the level of prices might be kept almost absolutely stable by honest government regulation of the money supply with that specific purpose in view. One seemingly simple way by which this might be attempted would be by the issue of inconvertible paper money in quantities so proportioned to increase of business that the total amount of currency in circulation multiplied by its rapidity, would have the same relation to total business at one time as at any other time. If the confidence of the citizens were preserved, and this relation kept, the problem would need no further solution."<sup>1</sup> Thus the virtues of an inconvertible paper currency are admitted, and it only remains to show how we can regulate the issues.

<sup>1</sup> *The Purchasing Power of Money*, p. 329. Priority in pointing out this fact belongs, I believe, to Mr Kitson.

## CHAPTER TEN

### THE SOLUTION OF THE PROBLEM

PROFESSOR IRVING FISHER is very pessimistic as to our ability to manage an inconvertible paper currency honestly and scientifically on the grounds that "sad experience teaches that irredeemable paper money, while theoretically capable of steadying prices, is apt in practice to be so manipulated as to produce instability."<sup>1</sup> That is quite true; but probably it is not so much due to the fact that our rulers are blessed with a double dose of original sin, as to the fact that the proper method of regulating a paper currency has never been pointed out.

Even Kitson has failed to point it out. His suggestion is that "the solution of this question is to be found in establishing a banking system which shall furnish sufficient currency at all times to satisfy the effective demands of trade and industry. This could be safely achieved by issuing credit against wealth in a safe proportion, say from 50 per cent. to 75 per

<sup>1</sup> *The Purchasing Power of Money*, p. 329.

cent. of its legally appraised value."<sup>1</sup> This is his only suggestion, and he declares that "credit issued against all kinds of wealth prevents inflation because it cannot cause a general rise in values; which would be like a man raising himself from the ground by his own bootstraps."<sup>2</sup>

This last argument, however, reads rather like the arguments of the Directors of the Bank of England at the time of the controversy which raged round the famous Bullion Committee and its Report. They argued that paper money could not possibly become depreciated so long as it was issued only against perfectly good bills, and this in spite of the fact that notes so issued had depreciated very considerably. Mr Kitson seems to overlook the fact that if we value our national wealth at present prices at, say, £24,000,000,000, it would be possible to issue, under his scheme, no less than £12,000,000,000 of Treasury notes, all on good security, and as this process would necessarily lead to a gigantic inflation of prices and nominal values the amount of paper which it would be possible to issue would rise indefinitely. And it is the way of business men to demand unlimited accommodation when prices are rising and they can get it on moderate terms. The vast inflation which followed the

<sup>1</sup> *A Fraudulent Standard*, p. 131.

<sup>2</sup> *Ibid.*, pp. 149-50.

war was the result of "credit issued against all kinds of wealth."

Professor Irving Fisher mentions a suggested method of regulating prices on a gold basis by means of a system of seigniorage. "Thus, as the supply of gold from the mines increased, and gold tended to depreciate in value, the value of gold coin could be kept up by making a continuously higher charge for coinage, in the shape of seigniorage."<sup>1</sup> But he himself dismisses this rather clumsy method on the ground that it would only serve to check expansion, whereas the most important feature of a currency system is that it should be able to expand indefinitely as required. Moreover it is doubtful if this would even check inflation since the bankers would probably be quite safe in issuing credit against uncoined gold owing to its general acceptability. At most they would have to discount its value in coin by the amount of the seigniorage, and this would mean an increase in the value of the coin, not a decrease in the value of the bullion. The whole suggestion is a fallacy, in fact, since there would be no less gold in existence, and the numbers of sovereigns or dollars which it would be possible to coin from them would remain the same, and also the amount of banknotes and credit which it would be possible to base upon this gold.

<sup>1</sup> *The Purchasing Power of Money*, pp. 330-1.

Professor Irving<sup>1</sup> Fisher has put forward a scheme of his own<sup>1</sup> for stabilising prices by varying the amount of gold in the unit of value.<sup>1</sup> The number of units of value which can be based upon a given quantity of gold will vary inversely as the amount of gold in each unit. Therefore the larger the amount of gold in each unit the smaller the number of such units, and the smaller the amount of gold in each unit the larger the number of such units. As prices, other things equal, vary inversely as the number of units of value issued they should also, to some extent, vary inversely as the amount of gold in each unit.

Professor Fisher would overcome the practical difficulties of constantly varying the weight of the coinage by doing away with gold coins and replacing them entirely by paper currency. This would consist of notes which would be, in effect, certificates entitling the bearer to demand a given quantity of gold from the Government. Holders of gold, on the other hand, would be entitled to sell their gold to the Government at the price fixed, and a small fee corresponding to what used to be called "brassage" would be charged to depositors to prevent speculation. Applying the scheme to English conditions the notes would be legal tender anywhere except at the Bank of England, where the holder would

<sup>1</sup> See *Stabilising the Dollar*, by Professor Irving Fisher.



always be entitled to demand gold at the rate fixed by the Government.\* The system would thus be much the same as the pre-war gold standard system except for the fact that the quantity of gold in the sovereign—which would be a purely ideal coin existing only in the imagination—would be constantly varying.

Suppose that index numbers showed a fall of one per cent. in prices, then the Government would reduce the amount of gold in the sovereign by, say, one per cent., the actual amount necessary being ultimately determined by experience, and this would enable the bankers to issue a larger number of units of value with a corresponding rise in prices. In the event of prices rising the amount of gold in the unit would be raised. This would reduce the number of units which it would be safe for the bankers to issue, and they would contract credit to that amount, thus causing prices to fall. And so the average of prices would be kept varying round a certain level within, it is anticipated, a comparatively narrow margin.

One obvious drawback to this scheme is that the Government would have to continually write down its stock of gold as gold increased in quantity by giving a larger and larger amount for the sovereign or the dollar. This would be a continuous source of loss, though not, perhaps, a very serious one. For the rest it will be more convenient to criticise this scheme

after setting forth a simpler and more efficient plan with which it can be compared.

It is odd that the simple and almost obvious solution of this problem should be so persistently overlooked. We have seen that the great check upon inflation, or the over-issue of credit, is the bank-rate. We have also seen that inflation means that credit is being issued in greater proportion than the increase in the output of goods justifies, its mark being rising prices; while deflation means that the increase in the output of goods is too great for the output of credit, its mark being falling prices. And when prices are steady it means that credit and the output of goods are expanding in practically equal proportion. Obviously, then, the output of credit must be governed by prices through the medium of the bank-rate. So long as prices remain steady the bank-rate should remain steady. When prices rise, indicating inflation, the bank-rate should rise. When prices fall, indicating deflation, the bank-rate should fall. And the method by which to judge the trend of prices is that of index numbers.

## CHAPTER ELEVEN

### PRICES AND THE BANK-RATE

THAT Kitson has never grasped the fact that the true method of maintaining what is called the "invariability" of the currency unit is by adapting issues to prices by means of the bank-rate and index numbers is shown by the following passage: "The main thing is to preserve the relation of the unit to the whole of our marketable wealth at the given time and place when and where our system started. Invariability is what the world has been seeking for ages. And as already stated this unit or standard would agree with the tabular standard, provided such table included all marketable commodities and every market transaction—an almost impossible task."<sup>1</sup>

But there is no need to take cognisance of every market transaction or even of all commodities. The system of index numbers will serve all necessary purposes, though it will probably

<sup>1</sup> *A Fraudulent Standard*, p. 140.

be necessary to make our index number system more thorough and far-reaching than has hitherto been attempted. But if we take a few scores or hundreds of staple or primary commodities it will probably not be necessary to take all secondary commodities into account. Thus the price of steel and the machinery made out of steel is so closely bound up with the price of coal and iron that it is doubtful if it will be necessary to take the secondary commodities into the reckoning. And the price of bread is so closely bound up with the price of wheat that the latter would probably suffice without the former. Mathematical accuracy is by no means necessary. So long as prices are kept fluctuating round a certain average level within a small percentage of deviation that will meet all the necessities of the case. This, however, is a technical question best decided by the statisticians.

Now the question of index numbers is a very complex one; but for present purposes it will suffice to illustrate the principles involved with the utmost simplicity for the general reader. Although some hundreds of commodities might have to be dealt with in practice, here we will be content with ten. Let us suppose that the new system is brought into operation on January 1st, 1923. The price of each selected commodity on that date will be reckoned as 100, thus:

Wheat . . . . .	100
Coal . . . . .	100
Iron . . . . .	100
Gold . . . . .	100
Milk . . . . .	100
Meat . . . . .	100
Cotton . . . . .	100
Wool . . . . .	100
Hides . . . . .	100
Tea . . . . .	100
Total	<u>1,000</u>

Thus these ten articles total 1,000. Whatever the bank-rate may be on that particular date the same rate will be charged so long as the average level of prices remains the same, which means so long as the average of all the index numbers of the various commodities taken remains at 100. But suppose that a week later the list stands as follows:

Wheat . . . . .	95
Coal . . . . .	100
Iron . . . . .	97
Gold . . . . .	101
Milk . . . . .	98
Meat . . . . .	97
Cotton . . . . .	99
Wool . . . . .	95
Hides . . . . .	102
Tea . . . . .	98
Total	<u>982</u>

This indicates that the general level of prices is falling, and that the output of goods is drawing ahead of the output of credit. The brake on credit is pressed down too strongly. The bank-rate must be lowered in order that credit may expand and keep up the general level of prices. But if the index numbers presently total more than 1,000, or more than an average of 100 per commodity, then credit is expanding faster than the output of goods. This means that inflation is beginning and it is necessary to screw down the brake a little; in other words, to raise the bank-rate. The simple rule is: when prices are rising, raise the bank-rate; when prices are falling, lower the bank-rate. The amount by which the bank-rate must be raised or lowered in order to check a given rise or fall in prices would make itself apparent in course of time as experience was gained so that it would be possible to check any upward or downward tendency almost immediately and restrain variation within very narrow limits.

The second table will serve to show the difference between the proposals advocated here and those of the Bi-Metallists. The demonetisation of silver by America, France, and Germany in 1872 and the long fall in prices which resulted from the fact that the increase in the output of goods was considerably in excess of the increase in the output of credit led to a demand that silver should be

made legal tender equally with gold at a fixed ratio, say, sixteen parts of silver to one of gold, in order to increase the available basis for credit.

The viciousness of this proposal lies in the fact that both the output of and the demand for gold and silver are constantly varying, with the result that the ratio of value between the two is constantly varying also. Now in order to maintain the fixed ratio it would be necessary that the banks should be prepared to give gold in exchange for silver or silver in exchange for gold at the ratio fixed no matter what the tendency to divergence or convergence in value might be. This would be possible when the tendency to variation was within very narrow limits, but as soon as the tendency to divergence from the fixed ratio became very strong the banks would be in much the same position as a rider who attempts to bestride two horses which are moving in opposite directions. The over-valued metal would be brought to the banks in vast quantities, while the under-valued metal would be drawn out. The latter would soon disappear from circulation, and the whole system would break down in face of any serious increase or falling off in the value of one metal as compared to the other.

In any case the system would be comparatively useless, since what we need is stability of prices, and bi-metallism could not give us that

because the supply of gold and silver together is a comparatively fixed quantity, just as is the supply of gold taken alone. It is essential to stability of prices that the output of credit shall proceed at a direct ratio to the output of goods, and bi-metallism can no more give us that than can the gold standard.

The proposals outlined here contain no fixed ratios whatever, neither between gold and silver, nor between gold and goods. Each particular article is left to vary according to the ratio between supply and demand, and relative values will be constantly changing. But the *average* price will be constant, because the output of credit will bear a constant ratio to the output of goods.

There is really nothing new in the idea of regulating prices by means of the bank-rate, nor need there be any doubt as to its efficiency in that direction. Prices always have been regulated by the bank-rate with an effectiveness which, owing to the utter failure of those responsible to realise that they held in their hands the instrument with which to render prices stable, has been but too deadly. The originality of this proposal lies in the suggestion that prices should not merely be regulated but stabilised by the bank-rate in an intelligent, scientific manner. If the driver of a motor lorry were to mount the kerb and run into a wall on one side of the street, then dash across



and smash into a shop window on the other side, then fly down the street taking off the wheel of a bus here, wrecking a tramcar there, and overturning an occasional lamp post, his licence would probably be revoked until he had learned to handle the wheel with skill and intelligence. Yet the vagaries of the bank-rate in the past have resembled the antics of such a lorry. The rate has been forced up and then forced down again by the powers that be with only the vaguest conception of the why and wherefore of such action, and ruin and desolation have been spread around in consequence. First they allow a period of inflation which they should not allow, and then they endeavour to atone for this error by committing another. They whip round and pursue a policy of drastic deflation, thus spreading ruin and bankruptcy around, depriving millions of their means of livelihood, and driving many to suicide. Yet all that is needed is that the bank-rate, the steering wheel of modern commerce, should be intelligently handled.

In the past the rate of discount has been generally decided by the amount of money available. When money is tight the bank-rate is raised, and when money is plentiful it is reduced. Thus the rate of discount is not adapted to the needs of commerce but to the amount of money, and this means that commerce has been obliged to adapt itself to the

amount of money available instead of the amount of money being adapted to the needs of commerce. The tail has always wagged the dog. Under the gold standard system it is inevitable that the rate of discount, which is the regulator which feeds money to commerce, should be governed by the amount of money available because the amount which it is possible to issue under that system is limited. And under an inconvertible paper currency system the same method has been pursued through sheer force of habit and failure to understand the principles involved. But the true method is to provide an unlimited supply of money, which would obviate the necessity of adjusting the rate of discount to the amount of money available, and then feed this money to commerce by means of the bank-rate and according to the level of prices as indicated by index numbers. "

Not the least advantage of the system advocated here is that it would confine the responsibilities of the Governors of the Bank of England within very narrow limits, and, for their present methods, would substitute a rule so simple that it would be almost impossible for them to go wrong. Indeed the simplicity and obviousness of this method are likely to be the chief obstacles to its adoption, since, though the causes of our economic troubles are clear and indisputable, people have very little faith

in obvious and simple remedies. How is it possible to believe that trade slumps and unemployment can be abolished by such simple means? Surely there must be a catch in it somewhere! Why, it would cost nothing to set in operation beyond the expense of a staff of clerks to calculate the index numbers under the direction of a competent statistician, and few will be ready to believe that such simple and inexpensive measures can be infinitely more effective as a remedy for unemployment than many millions per annum squandered in doles.

We are now in a position to criticise effectively the scheme of Professor Irving Fisher for stabilising prices by varying the amount of gold in the unit of value, by comparing it with the above proposals. There is undoubtedly a connection, though not a very close one, between the amount of gold contained in the unit of value and its purchasing power. But while the amount of gold in the unit determines the number of units which can be safely issued upon the basis of a given quantity of gold, it does not determine how many units actually are issued within the limits of safety, nor yet the velocity of circulation. That is determined by the bank-rate.

Now let us suppose that the Government attempt to check a given rise in prices by increasing the amount of gold in the sovereign. This could only affect prices by inducing the

bankers to check inflation by raising the rate of discount. Thus the real regulating factor would be the bank-rate, and the question at once arises: why bother about changing the amount of gold in the sovereign according to the rise or fall of prices as revealed by index numbers when prices can be directly controlled by the bank-rate itself? Why do indirectly and inefficiently what can be more efficiently done directly? Why should the owner of a motor-car pay a chauffeur to grasp the steering-wheel and himself guide the hands of the chauffeur from the back seat by means of pieces of string tied to his elbows? Surely it would be safer and more efficient to allow the chauffeur to ~~do the driving~~ under definite instructions as to the course he should pursue or else grasp the wheel itself and drive.

Professor Fisher's plan is simply a method of doing indirectly and inefficiently by means of the amount of gold in the sovereign or the dollar what might be done directly and far more efficiently by means of the bank-rate. It is extremely improbable that it could act efficiently unless the bank-rate was adjusted according to the information provided by the index numbers, and in that case it would be unnecessary. Left to their own devices the natural instinct of bankers is to limit credit only according to the amount of money available, as that means the largest amount of

profit. Now suppose that the Government raise the amount of gold in the unit in order to offset a given rise in prices. This might reduce the number of units which the bankers could safely issue upon the basis of the available supply of gold and yet leave a considerable margin still available for further expansion. In that case the bankers would probably make no alteration in the rate of discount and prices would continue to rise. And the Government might have to make a second or even a third alteration before the bankers moved, and then they would probably take the alarm, force up the rate of discount suddenly, and bring on a violent contraction of credit accompanied by depression of trade. We might get oscillations of prices just as violent as under the old system unless there was a clear understanding as to the use of the bank-rate according to the movements of the index numbers, and in that case there would be no need to bother about the amount of gold which the unit of value contains.

Under an inconvertible paper currency system this adjusts itself according to the action of the bank-rate. Thus in 1920 the value of the pound note was only about 15s. according to the pre-war standard, but to-day it has risen to about 18s., and this has been brought about automatically by the action of the bank-rate. What useful purpose would have been served had the Government en-

deavoured to achieve the same result by influencing the bank-rate through raising the amount of gold in the sovereign from 15s. to 18s.?

Professor Fisher asserts that his scheme would retain the gold standard, but this is a very doubtful claim. How can we call anything a standard which is constantly changing? He himself says that "a true standard of value (general purchasing power over commodities) such as we would like our monetary standard to be, should not be dependent on one commodity merely, whether that commodity be gold or silver or wheat or any other single sort of goods."<sup>1</sup> Of course not. The only true standard is one the purchasing power of which is constant, and if Professor Fisher succeeded in stabilising prices under his scheme the true standard would be, not the amount of gold in the dollar or the sovereign, which would be constantly changing, but the paper unit of value the average purchasing power of which remained constant.

Under Professor Fisher's scheme gold would be no more the standard of value than under an inconvertible paper currency. Under the latter the unit of value would always represent a certain amount of gold, because gold could always be bought with it, and if the amount of gold which could be bought would

<sup>1</sup> *Stabilising the Dollar*, p. 84.

be constantly varying, this is equally true of Professor Fisher's scheme. Therefore, as the bank-rate is the only efficient instrument for controlling prices, there is no reason why we should not adapt it directly to the index numbers instead of attempting to manipulate it indirectly by varying the amount of gold in the unit of value.

It is the business of our credit system to feed commerce with currency to the exact extent of its needs, and the feeding mechanism should undoubtedly be governed by the rate of discount, not by the quantity of gold in the unit of value. It has been pointed out that gold owed its adoption as the standard measure of value in the first place to the fact that it is uniform in quality, comparatively indestructible, limited in quantity, and, therefore, very valuable in proportion to its bulk and weight. Paper money possesses all the advantages of gold, and more. It is equally uniform in quality, and, if not indestructible, it can be readily replaced; and, in place of being limited in quantity, it can be supplied in quantity exactly proportioned to the needs of trade; while its value in proportion to its bulk and weight is just what suits our convenience since a small slip of paper may serve as a token for a thousand pounds or a million. Paper currency is the ideal currency if only it is exactly proportioned to the needs of commerce, and this

can be accomplished with the utmost ease by means of the rate of discount. Gold, therefore, should be relegated to its proper place as a commodity and nothing more.

Macleod concludes the twelfth chapter of the second volume of his *Theory and Practice of Banking*, with the following passage: "The primary object of the history we have given is to establish *Principles*. We have given an exact history of the different doctrines which have been held as to managing the Bank and the Paper Currency, until at last scientific reasoning and practical experience have equally demonstrated that the true method of controlling credit and Paper Currency is by means of the *Rule of Discount*. We have given ample details of the steps by which this great doctrine gradually established itself in the Banking and Mercantile World. To pursue the subject further would not bring out any new principles; it would only give superfluous illustrations of a principle which is now as firmly established among all competent persons as the Newtonian Law of Gravity is among men of science; and, therefore, prolonging an account would only occupy space without any good object." Macleod further points out that this principle was first demonstrated in the first edition of his work in 1856.

From this passage it would seem as if Macleod had anticipated the principle of regu-



lating prices by means of the bank-rate, which it is the main purpose of this work to demonstrate, and he does, indeed, appear to have had a sort of half glimpse. Obviously he came nearer to it than anyone else before or since up to the publication of this work. Nevertheless, he nowhere demonstrates that the bank rate is the true instrument for regulating prices, so far as I am aware, and he seems to have been thinking mainly of the foreign exchanges, though it is fair to point out that foreign exchanges and prices are really only two different aspects of the same great question. But that he had not fully grasped all the bearings of the problem is clearly shown by the latter half of the passage quoted, for if there is one thing more obvious than another it is that the principle outlined in this work is not "as firmly established among all competent persons as the Newtonian Law" even to-day, still less in Macleod's time.

How near Macleod came to a clear grasp of the law which governs prices and the proper method of regulating them is shown by this generalisation of his: "The Value of Money varies Inversely as Prices, and Directly as Discount."<sup>1</sup> This is really equivalent to saying that prices vary inversely as the rate of discount, which is, broadly speaking, the very principle which it is the main purpose of

<sup>1</sup> *Theory and Practice of Banking*, Vol. i., p. 58.

this book to demonstrate, owing to the fact that stability of prices is the key to the unemployment problem.

Yet with Macleod it was a case of "So near and yet so far." He failed to see that prices might be regulated by the bank-rate, and this failure appears to have been due to his attachment to the gold standard. Thus, while he declared that "an Improperly Low Rate of Discount is, in effect, a Depreciation of the Currency," he added that "the true great power of governing and controlling the Paper Currency, or Credit, is by *carefully adjusting the Rate of Discount to the state of the Foreign Exchanges and the state of the Bullion in the Bank.*"<sup>1</sup> The latter part of this passage shows where Macleod went wrong, for while it presents the policy which must be followed with a currency based on gold, it is the following out of such principles which produces contractions of credit and trade depression, as a study of the mechanism of the exchanges and the mode of their operation under the gold standard will show. Inflation at home, under the gold standard, increases prices, not only in paper but in gold. The effect of increased gold prices is to stimulate imports and to check exports. This swings the exchanges against us and puts a premium upon the export of gold. But the export of gold reduces the amount of gold available

<sup>1</sup> *Theory and Practice of Banking*, Vol. ii., p. 346.

in this country as a basis for credit and causes a tightness of money. Then the exchanges being against us and gold going out of the country, the bank-rate is raised, as Macleod recommends. This causes a contraction of credit and a fall in prices. The increased bank-rate checks the export of gold, while the fall in prices checks imports and stimulates exports. This certainly redresses the adverse exchange, but the contraction of credit and the fall in prices also cause depression of trade.

What we need is a system which will regulate the exchanges without causing trade depression. With an inconvertible paper currency regulated by the bank-rate according to the level of prices, none of the above sequence of events could occur. Only such gold would be exported to balance imports as was available in the market and could be spared by the country, and no matter how much was exported there could be no contraction of credit as a result since the amount of money available would in no way depend upon the amount of gold. The bank-rate would simply ignore the foreign exchanges because they could be trusted to adjust themselves. An adverse exchange, properly so called, is the sign of an adverse balance of trade, and its effect is to put a premium upon exports. So long as the adverse balance of trade grows it is desirable that the exchange should become more and more adverse, since it does us no serious

harm and continues to increase the bonus upon exports, and thus increase our selling power, the tendency of which will be to increase exports and thus automatically redress the exchanges without any contraction of credit at home.

Stabilising prices and stabilising exchanges, by the way, are not the same thing. With an inconvertible paper currency in this country the exchanges would only be permanently stabilised if the other commercial countries adopted the same system. If they adhered to the gold standard while we adopted an inconvertible paper currency, regulated by the bank-rate, the course of the foreign exchanges would vary with the price of gold. In the event of gold continuing to depreciate as before the war, our inconvertible pound might be quoted above the old par of exchange. On the other hand, if all the leading commercial countries should adopt a scientifically organised currency, the exchanges would be permanently stabilised except for those fluctuations which inevitably result from the ebb and flow of international trade.

Macleod not only failed to realise the possibilities of the rate of discount in stabilising prices, but even denied that an invariable *standard* of value is possible, though he admitted the possibility of a *measure* of value without, apparently, making up his mind as to whether or not this measure could be invariable.<sup>1</sup>

<sup>1</sup> *Theory and Practice of Banking*, Vol. i., pp. 114-5.

There is no need to enter here into the somewhat sophistical reasoning by which he attempted to justify these propositions. It will suffice to point out that a measure of value we must have and that such a measure will be useless unless it is a *standard* to which all can appeal; while the more closely it approximates to absolute invariability the more useful it will be. There is no reason why a certain fraction of the wealth of the nation on a certain date, as ascertained by index numbers, should not be accepted as our standard measure of value, and the purchasing power of that fraction, which we can call the "pound," can be kept as invariable as is necessary for the practical purposes of commerce by means of the rate of discount.

The implication that prices vary inversely as the rate of discount contained in Macleod's formula given above, is, of course, only approximately correct, only true, that is, in a very general sense. With the bank-rate at 7 per cent. prices fall rapidly, and when it is reduced to 6 or 5 per cent. they fall still, but not so rapidly. As the bank-rate is reduced, the rate of decline in prices is reduced until there comes a point at which the fall ceases entirely. If the bank-rate is reduced still further, the turning point is passed and prices enter on the upward grade. The turning point seems to have been reached recently when the bank-rate was reduced to  $4\frac{1}{2}$  per cent., and prices are now rising. There

is always a certain "critical point," which marks the turn in prices. As the rate of discount falls prices fall also until the critical point is reached, and then they begin to expand again. Or, taking the matter from the other end, as the bank-rate is raised from zero the rise in prices becomes steadily less marked until the critical point is reached, when they commence to decline, the decline being accelerated by each fresh rise in the bank-rate. We need to keep the bank-rate varying as closely as possible round that critical point by means of index numbers.

Let us now look at the record of prices during the last few years, as indicated by the index numbers of *The Economist*, and see how the matter works out in practice.

Basis (average 1901-5)	. 100
End July, 1914	. 116.6
„ December, 1915	. 165.1
„ December, 1917	. 263.2
„ November, 1918	. 282.6
„ December, 1918	. 277.0
„ December, 1919	. 334.7
„ March, 1920	. 379.6
„ December, 1920	. 269.3
„ December, 1921	. 198.0
„ January, 1922	. 194.7
„ February, 1922	. 193.6
„ March, 1922	. 195.3
„ April, 1922	. 194.8
„ May, 1922	. 198.7
„ June, 1922	. 199.5
„ July, 1922	. 199.8

Thus prices reached their peak in March, 1920, and it is instructive to compare with this table the following list of changes in the bank-rate:

Raised from 5 to 6 per cent. on November 6th, 1919.  
 Raised from 6 to 7 per cent. on April 15th, 1920.  
 Reduced from 7 to  $6\frac{1}{2}$  per cent. on April 28th, 1921.  
 Reduced from  $6\frac{1}{2}$  to 6 per cent. on June 23rd, 1921.  
 Reduced from 6 to  $5\frac{1}{2}$  per cent. on July 21st, 1921.  
 Reduced from  $5\frac{1}{2}$  to 5 per cent. on November 3rd, 1921.  
 Reduced from 5 to  $4\frac{1}{2}$  per cent. on February 17th, 1922.  
 Reduced from  $4\frac{1}{2}$  to 4 per cent. on April 13th, 1922.  
 Reduced from 4 to  $3\frac{1}{2}$  per cent. on June 16th, 1922.  
 Reduced from  $3\frac{1}{2}$  to 3 per cent. on July 13th, 1922.

Such was the shortage of goods following the war and the keenness of speculative enterprise, that even a 6 per cent. bank-rate failed to stop inflation, and prices kept on rising until the rate was raised to 7 per cent. on April 15th, 1920. But the 7 per cent. bank-rate proved thoroughly effective, and by December of the same year prices had fallen 110 points, or not much less than one-third. No wonder trade collapsed! What business man would be mad enough to buy with prices falling at that rate? They continued to fall until the early months of this year in spite of repeated reductions in the bank-rate. The rate reached  $4\frac{1}{2}$  per cent. on February 17th of this year, and in March the figures show a distinct upward tendency. This suggests that the critical point or the turning point is  $4\frac{1}{2}$  per

cent. under present conditions, but it must be borne in mind that the critical point may be a very different one under different circumstances. Higher prices mean higher interest, and it would probably take, say, a 5 per cent. bank-rate to accomplish now what would have been done by a 3 per cent. rate before the war. Again, a 6 per cent. rate failed to check inflation immediately after the war, yet it was not until the rate was reduced to  $4\frac{1}{2}$  per cent. that the turn came after the slump. This was obviously due to the fact that the former period was a boom period when everyone was optimistic and disposed to risk things, whereas now we are in the midst or nearing the end of a slump when the general feeling is pessimistic and cautious, as the result of having been badly bitten, and people are indisposed to take risks. All this illustrates the fact that prices cannot be kept stable by a bank-rate kept at the same level. It will have to be varied constantly according to circumstances, and will need to be much higher when people are in an optimistic and speculative mood than when they are depressed and cautious. It may be added that to keep prices varying closely round the selected level it will probably be necessary to make additions to and reductions from the bank-rate in smaller fractions than one-half per cent. Fractions of one-quarter or even one-eighth may have to be used.



And now let us look at the unemployment figures and see how they are affected by the bank-rate and declining prices. These figures are taken from *The Economist*.

*Trade Union Unemployment Percentages*

	1920	1921	1922
End of January . . .	2'9	6'9	16'8
„ „ February . . .	1'6	8'5	16'3
„ „ March . . .	1'1	10'0	16'3
„ „ April . . .	0'9	17'6	17'0
„ „ May . . .	1'1	22'2	16'4
„ „ June . . .	1'2	23'1	15'7
„ „ July . . .	1'4	16'7	14'6
„ „ August . . .	1'6	16'3	
„ „ September . . .	2'2	14'8	
„ „ October . . .	5'3	15'5	
„ „ November . . .	3'7	15'9	
„ „ December . . .	6'0	16'5	

Thus the percentage of unemployed trade unionists at the end of April, 1920, was only 0·9, a quite nominal figure and about as low as it could be. At that time, be it noted, we heard nothing about the workers being thrown out of employment by German competition, although prices and nominal costs of production were then at their height. That cry has developed since we deliberately forced down prices with the object of enabling our manufacturers to meet German competition. And to-day we hear complaints about competition from Germany after our prices have been cut down by 50 per cent. while prices in Germany have been continuously advancing.

On April 15th, 1920, the bank-rate was raised to 7 per cent., and thenceforward we get a rapid fall in prices and a steady rise in the number of unemployed until it reached the appalling percentage of 23 in June of the following year. The figures clearly bring out the futility of the pretence that it is the increase of unemployment which causes the fall in prices and not the fall in prices which causes unemployment. For, apart from the fact that the bank-rate was raised for the express purpose of bringing down prices and that employment was good until they were brought down, we see that the rise in unemployment mostly developed after the huge fall in prices which marked the end of 1920. By that time prices had fallen nearly one-third in a few months, while unemployment had only risen to 6 per cent. It was during the next six months that the maximum amount of unemployment developed, and the fall in prices was less during the whole of the subsequent twelve months than it was during the few last months of 1920. After the maximum had been passed the employment situation began to improve a little as the fall in prices became steadily less rapid, but the shock to public confidence caused by such a slump in prices and the immense financial losses resulting necessarily renders recovery very slow, especially as no one knows for how long the policy of deflation has been laid aside.

Observe that the tables given above practi-

cally constitute a section of Sauerbeck's chart showing the Course of Average Prices of General Commodities in England expressed statistically. We get the usual rise in prices until they reach their peak, when a financial crisis supervenes, in this case represented by a raising of the bank-rate to 7 per cent. We then get the long downward slope of prices accompanied by increasing unemployment until the fall in prices is checked. This always occurs, but although it has occurred again and again, exactly the same cycle of events having been repeated scores of times, and although the slump in prices is followed by a flood of unemployment as surely as the setting of the sun is followed by the night, yet the cause of these floods of unemployment is made a wonderful mystery. Even the periodical recurrence of sun-spots provides a more acceptable explanation than the one which is staring us in the face and shouting for recognition.

What causes the flood of unemployment is as plain as the sun in the heavens. Here is an illustration of the whole matter in a nutshell. "Mr R. M. Turner, O.B.E., Secretary to the British Legation, Copenhagen, in his report on Denmark, dated March last, writes that the economic situation throughout last year was characterised by depression and unemployment. The fall in prices which began in the autumn of 1920 found a number of Danish industrial and

business houses with large stocks on which increasingly heavy losses were incurred as the year proceeded. The fall in prices was also attended by an almost complete cessation of buying on the part of the general public, who partly had provided themselves as adequately as possible during the previous period of rising prices, and partly refrained from placing new orders in the hope of a further fall in the future. The result was that no merchant or manufacturer dare place orders for stock, and the whole of the community bought only in such quantities as were regarded as the minimum for immediate requirements."<sup>1</sup> It may be added that the only thing for merchants and manufacturers to do, in the absence of orders, was to dismiss hands wholesale in order to save themselves from ruin, or at least in the endeavour to do so. Hence the flood of unemployment. Why, then, bother about sun-spots?

The fact that traders refuse to buy during periods of falling prices and use up their accumulated stocks illustrates how admirably our present system is designed to produce and accentuate to the utmost possible extent violent fluctuations in prices. During periods of falling prices stocks are reduced very low and, owing to the factories being closed down or running short time for long periods, it is probable that there is a considerable reduction

<sup>1</sup> *Board of Trade Journal*, June 22nd, 1922.

in productive power which cannot be at once restored. Farmers, cotton growers, rubber growers and planters of all descriptions, unable to obtain remunerative prices during times of depression, reduce the areas under cultivation considerably. Thus when the corner is turned and another period of inflation commences stocks are very low and productive power is low also for the time being. This, of course, very much accentuates the tendency of prices to rise when the bank-rate is lowered below the critical point. Hence the fluctuations in prices are violently accentuated. Whereas under a sane currency system every increase of output would be automatically accompanied by an increased issue of purchasing power, and vice versa, so that fluctuations, even of individual commodities, would be reduced to a minimum.

Seeing that a reduction of the bank-rate to  $4\frac{1}{2}$  per cent. caused a turn towards higher prices, and that the rate is now down to 3 per cent., it is evident that we stand on the threshold of a period of inflation in spite of the declared intention of the Government to deflate and restore gold payments as soon as the state of the foreign exchanges renders that course practicable. This uncertainty as to what policy the Government will follow in the immediate future is obviously one of the most powerful obstacles to a trade revival. But assuming events to follow a normal course and develop

according to precedent we may expect to see a steady rise in prices and a steady revival of trade. This will bring with it a rise in the cost of living. The cost of living appears to be about stationary at present in spite of a rise in the average price of general commodities, but this is obviously due to the tendency of food prices and the cost of fuel and lighting to fall during the summer months and the cost of living must soon follow the general trend of prices.<sup>1</sup> The rise in the cost of living will then begin to be punctuated by demands for higher wages in compensation, strikes, and industrial troubles generally. But prices will continue to go up and the cost of living to rise until the people begin to get exasperated and the Government alarmed.

The "experts" will then bethink themselves again of their policy of deflation. They will be warned beforehand that deflation and falling prices mean disastrous trade depression and widespread unemployment, but they will probably be deaf to all warnings, and the bank-rate will be forced up. Then there will follow a vast contraction of credit. All speculative enterprise will cease. Traders will cease to buy and content themselves with unloading accumulated stocks. Hands will be dismissed on a wholesale scale and a great epidemic of unemployment will set in.

<sup>1</sup> The cost of living commenced to rise in June.

Then the "experts" will begin to scratch their heads and wonder what causes these "mysterious" floods of unemployment. A crop of "explanations" will be put forward consistent only in ignoring every essential factor of the situation. We shall be told that the decline in trade is due to "world causes," ignoring the fact that it is only in those parts of the world where deflation has been in progress that the depression exists.<sup>1</sup> We shall be told that the decline in trade is not due to the fall in prices, but that the fall in prices is due to the decline in trade, ignoring the facts that the very object of deflation is to cause a fall in prices, that a fall in prices as the result of deflation is a necessary deduction from the

<sup>1</sup> "By reason of its high gold standard and its wide radius of action the U.S.A. dollar can be taken as a standard against which the currencies of other countries can be placed in comparison as to their percentage of gold standard with the dollar. Switzerland comes first, with 101 per cent., and, as shown above, has at least 100,000 unemployed; a large number compared to the population. The U.S.A., with 100 per cent., has three to four millions; Sweden 98 per cent. gold standard 34·8 per cent. unemployed, Holland 94 per cent. gold standard, Great Britain 90 per cent., Denmark 77 per cent., Norway 62 per cent., have all high unemployment figures; while Germany, with 2 per cent. gold standard, has practically the least amount proportionally to population of unemployment, and Czecho-Slovakia, with 9 per cent. gold standard, has but 16,000 unemployed." (W. K. Horne, *World's Work*, July, 1922.) The reason why the countries with depreciated currencies have least unemployment is obviously that there has been little deflation in those countries, so trade has not been paralysed by falling prices.

quantity theory, and that trade was booming until the contraction of credit set in as the result of forcing up the bank-rate. We shall be told that unemployment is the result of a falling off in demand, ignoring the fact that there can be no falling off in effective demand without a falling off in effective purchasing power as the result of a contraction of credit, and an obstruction to buying in the shape of falling prices. As a last resort we shall be told that all our economic evils result from German competition, ignoring the fact that German competition never does us any harm when the bank-rate is low and prices are rising.



## CHAPTER TWELVE

### IS NATIONALISATION NECESSARY?

OBSERVE that the question at the head of this chapter is not: Is nationalisation *desirable*? but: Is nationalisation *necessary*? We have nearly a million and a half unemployed in this country alone, at the time of writing, and it is desirable to provide them with work at the earliest possible moment. To do this it is necessary to obtain the greatest possible measure of agreement and support, and to avoid antagonising powerful classes or interests as far as possible. The question of the *desirability* and of the *necessity* for nationalisation are two quite distinct things and, in discussing this matter, should be kept distinct.

If it is possible to deal with the problem of unemployment without raising the antagonism of the financial classes the task will be enormously facilitated. Not only is it obvious that the above scheme does not necessarily involve nationalisation, but it is equally obvious that it

is as much to the advantage of the bankers as of the unemployed. They would be practically freed, once and for all, from the dread of recurring crises. There would always be an abundance of money or credit to keep pace with the output of goods, and the continuous whirling of the economic machine at full speed and efficiency would mean the maximum amount of profit to themselves. The business classes would benefit equally, since they would be free from the continual danger of having the fruits of their whole life's labour suddenly swept away by causes beyond their control and through no fault of their own as the result of financial crises. The workers would benefit by continuity of employment at good wages and fixed prices. The knowledge that every advance in wages was not going to be swallowed up immediately by a corresponding advance in prices would render industrial troubles far more rare and far easier of adjustment. Indeed we should be within reach of a method of adjusting all wage disputes by a simple system of costing and nine-tenths of our industrial difficulties would be abolished at a stroke. Statesmen would have the advantage of abundant and constant revenues which would enable them to pay off debt and leave an ample margin for social reforms. In short, it would be a tactical error in face of such a unity of interests to throw in the apple of discord by proposing

the nationalisation of the banks at this juncture and in this connection. That issue should be kept quite distinct. As we shall see in a later chapter, this same scheme will enable us to deal satisfactorily with the dangers of financial monopoly without resorting to nationalisation.

All that is necessary in countries which have a central bank is a slight modification of the banking laws, and a definite instruction to the Governors of the central bank to follow the rule already outlined. It should be no more difficult to secure its honest and efficient execution than it has been to secure the carrying out of Peel's Bank Charter Act. The paper money should be made inconvertible and either the Government or the Directors of the central bank should be authorised to issue just as much additional currency as might be necessary to maintain the accepted level of prices. An abundance of currency could always be kept available; but, generally speaking, *no additional legal tender should be issued until the credit possible upon the basis of that already issued is practically exhausted.*

In case of countries like the United States, having no central bank, a similar modification of the banking laws would be necessary, for it would be extremely unwise to leave the matter to the option and discretion of the banks themselves. It would probably be wise to institute

a central bank ; but there would be no difficulty in setting up a staff for recording prices and compiling index numbers and instructing the banks to adjust their rate of discount accordingly.

## CHAPTER THIRTEEN

### OUR FOREIGN TRADE

ADMITTING that this proposal for issuing purchasing power in exact proportion to the output of goods is sound enough so far as it goes, yet it may be argued that, as a cure for unemployment, it fails to take the circumstances of foreign trade into account. England is largely dependent upon her foreign trade, not only for her supplies of food and raw materials, but, as a consequence, for the employment of her work-people. That is true, and it may be admitted that foreign trade provides by far the most difficult aspect of the problem, for we have little control over foreign markets or the financial policies of foreign countries. Nevertheless, the difficulty is not so great as at first sight appears.

It should be remembered that we sell to foreign countries only that we may obtain in return those supplies of food and other materials which we do not ourselves produce. The goods we send out are really payment for the goods we bring in, and in order that we may buy from

others it is necessary that they should buy from us in return. Now, if foreign countries fail to buy from us during times of depression it is not because they have not the goods to exchange. Even at the present moment the world contains an abundance of all the materials we require, and foreign nations are quite willing to sell them. The stagnation of trade is due to the fact that they, like ourselves, are paralysed by falling prices. They can no more afford to buy on a falling market than we can. The question is as to how far the adoption of a sound currency policy by ourselves would enable us to overcome the difficulties of trade caused by unsound currency policies abroad.

A slump in trade abroad would cause a falling tendency among prices at home; but, under the currency policy which has been outlined, purchasing power in this country would be automatically kept up by the reduction of the bank-rate and consequent expansion of credit. This would enable us to keep up our imports and, if exports tended to fall off, it would mean that the exchanges would go heavily against us. Now the effect of an adverse exchange is to put up the price of imports and to reduce the price of exports. It has much the same effect as an automatic bonus upon exports which steadily increases the more the balance of trade goes against us.

As there would no longer be any payment

in gold on demand it would be impossible to raid our gold reserves in order to redress the balance. Gold would be treated just like any other commodity, and anyone needing it would have to go to the gold brokers and buy it just like buying wheat or sugar in the open market. Only what was left over after providing for our own needs or our own reserves would be available for export. The British Empire is the world's greatest gold producer, and most of the gold comes to London to be re-exported to the countries needing it. At such a time as that under consideration the balance available for export would probably be not much greater than that available in ordinary times, so we could not make up the deficiency of our exports in gold.

The imports would have to be paid for in goods, and it is a question how far the increasing selling power caused by the increasingly adverse exchanges, which would result from keeping up our imports by keeping up our purchasing power, would enable us to keep the stream of foreign trade circulating. The experiment is well worth trying, and there need be little doubt as to the result. Our selling power would steadily increase, and, as foreign countries are always anxious to sell, the stream would soon overflow all obstacles and cut fresh channels for itself. Moreover, we have the example of Germany before us. Although she

is largely dependent on foreign trade, and although many of her best customers are heavily smitten by the slump, she has very little unemployment because she has kept up the purchasing power of her people instead of diminishing it. Her success is the more remarkable because of the hostility which her traders have to face in other countries. If Germany can keep her people employed during times of depression abroad, and that by methods by no means very scientific, why should not we?

Here is a typical glimpse of the condition of trade in Germany contained in a report on the condition of the leading industries of the Palatinate. "The brick-fields were unable to cope with the demand for bricks, and there was a deficiency in tiles for roofing. Iron foundries were engaged on orders placed by the motor-car industry, while other branches of the iron and metal industries had sufficient orders. In spite of bounding prices orders for tricot goods for the winter season have this year been placed unusually early, and one firm in particular reported that it had already secured orders guaranteeing employment for the rest of the year. The shoe industry was also extremely busy, the chief demand being for goods for delivery, but contracts were also made for July, August and September."<sup>1</sup> There is much more to the same effect, and all the reports tell

<sup>1</sup> *Board of Trade Journal*, June 22nd, 1922.



the same story. It is abundantly clear that Germany's home trade is not being depressed by the condition of foreign trade, but that her foreign trade is thriving because she has maintained the prosperity of her trade at home. When we take intelligent steps to maintain the prosperity of our home trade we shall find that the prosperity of our foreign trade will follow.

There is no reason why, given a healthily organised credit and currency system, a crisis or depression abroad should materially affect prosperity and the state of employment in this country. Since we only sell in order that we may buy in return those classes of goods which we do not ourselves produce, and since the existence of a crisis or depression in one or more foreign countries does not mean that they have less to sell, there is nothing in such a state of affairs to prevent us from buying what we need, and, once the purchase is made, the seller must take payment in goods in one form or another. In point of fact a depression abroad usually means that there is an extra abundance of goods available for purchase at lower prices. Moreover this country chiefly needs food and raw materials, and the production of these articles is not seriously affected, as a rule, by a commercial crisis. As to the fearsome effects of foreign competition during times of depression, so much dreaded in some quarters, it may be laid down that the country which cannot

buy cannot sell, and that the country which buys is bound to sell.

An excellent illustration of the fact that when a slump abroad causes a crisis and depression in this country it is due entirely to our vicious credit and currency arrangements is provided by the case which occurred in the year 1857, when a slump in America was followed by a crisis and depression here. The American slump caused a great fall in the value of the vast amount of American securities held in this country, and this caused a contraction of credit here. All the usual results followed—the crisis, the fall in prices, and the slump in trade. But the fall in the value of the American securities could not have affected our financial stability in the least had our currency been scientifically organised. With an inconvertible paper currency regulated by the bank-rate and quite independent of either American securities or gold, there would always be an abundance of money available. Any causes which tended to lower prices by contracting credit would be met and checked automatically by a lowering of the bank-rate and an expansion of credit.

An illustration of the fact that a depression in one country need not necessarily cause depression in another is provided by Sauerbeck's chart which shows that in 1901 there was a boom in America while this country and

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Germany were in the grip of depression; and now Germany is enjoying comparative prosperity, as the result of keeping up the purchasing power of her people, while England and the United States are afflicted by a slump.

Again, the present substantial improvement in trade and employment in this country commenced with the first reduction in the bank-rate early in the present year, and has been considerably accentuated by the subsequent reductions. The reduction in the number of unemployed was regular and continuous week by week until the Engineers' Strike and the Shipyard Strike began to affect matters adversely, and since those strikes were settled the reduction has been renewed. The progress already made is substantial, and the further lowering of the bank-rate to 3 per cent. should bring a further improvement. This improvement is entirely independent of the state of trade abroad. There is no change whatever in conditions in Russia or any other country to account for it, and this illustrates the folly of assuming that the key to improved conditions lies in the opening of Russian markets, and similar illusions. If Russian markets are not opened the loss will be confined mainly to Russia.

Yet the improvement in home trade is, and will be, accompanied by an improvement in foreign trade. That is because it enables our

people to buy. The people from whom we buy are compelled to take their payment in goods, and this enables us to sell. So far as foreign trade is concerned we may almost say: Take care of the purchases and the sales will take care of themselves. When we buy our selling power is automatically increased by the operation of the exchanges. In times of bad trade abroad we can buy more cheaply, and the operation of the exchanges converts this increased purchasing power into increased selling power, since any tendency to a falling off in exports would swing the exchanges against us, and thus act like a bonus upon exports, the bonus being really provided by the cheaper imports.

But, after all, it is not necessary to depend on these considerations since, once the principle of regulating prices by means of the bank-rate and an inconvertible paper currency is generally recognised, it will be possible to call an international conference and secure its adoption in all the leading commercial countries.

How an inconvertible paper currency will stimulate foreign trade as well as home trade by maintaining or increasing the general level of prices is shown by Mr J. P. Wileman, C.E., in his study of the Brazilian Exchange.<sup>1</sup> The experience of Brazil shows that "when the fall

<sup>1</sup> *Brazilian Exchange: The Study of an Inconvertible Currency.*

in the exchange is caused by a reduction of the value of the exports themselves there will be no increase of imports"; but that when exchange is depreciated by a depreciation of the currency then "during the periods of low exchange, in place of any decrease in the value of imports taking place, there is a decided tendency to increase the demand, in spite of the rise in nominal paper prices." He adds: "This stereotyped tendency to increase the consumption of imports precisely when a decrease would be expected and desirable, is one of the many paradoxes of inconvertible currencies."<sup>1</sup>

But there is nothing mysterious about the apparent paradox, and the increased buying is not merely in spite of, but because of, the rise in prices. Everybody buys freely when prices are rising, and this buying extends to imported articles as well as to articles produced at home. So imports are stimulated and, as the imports have to be paid for, exports are stimulated as well. This would be even more the case with a manufacturing country like England with its multifarious products than with Brazil, which is so largely dependent on one particular commodity—coffee, the total value of which depends on the seasons and the state of the foreign markets, both of which are beyond the control of Brazil.

<sup>1</sup> *Brazilian Exchange: The Study of an Inconvertible Currency*, pp. 15-16.

Thus the experience of Brazil illustrates what is happening in Germany to-day, and why the number of German unemployed is down to a quite nominal figure, as against our own figure at its worst of over two millions. Foreign trade shares the prosperity of the home trade because great productivity at home means a large output of wealth and provides the wherewithal to buy. And if we buy we are bound to sell because our customers must take payment. So once again we see that the prosperity of our foreign trade is dependent upon the prosperity of our home trade, and not vice versa.

The suggestion that the increased consumption of imports as the result of rising prices represents one of the paradoxes of an inconvertible currency is an echo of the misconception, deeply rooted among economists, that a fall in prices is accompanied by increased consumption. Business men do not hold this idea, and it is only true under certain limited circumstances. For instance, the Indian Government have found that a reduction of the duty on salt is usually accompanied by so considerable an increase of consumption as to produce a larger revenue from a smaller tax. But in a case like this a definite amount is taken off the price at one step, and there the fall ceases. Even those who have large stocks on hand do not necessarily lose anything, since the amount of the tax on the quantity not sold will

be refunded. There is no reason to stop buying unless there is some prospect of a further reduction in the tax. Much the same holds good of a reduction in price owing to a fall in the costs of production, because no loss to the producer is involved, and such a reduction is not likely to be so soon repeated as to induce the consumer to wait for a further reduction. But the reduction in prices which results from a sharp contraction of credit is considerable, of long duration, and of very uncertain extent. Those business men with large stocks on hand lose heavily, and the situation leaves them no alternative but to cut purchases down to the lowest possible figure and reduce expenses by dismissing as many hands as possible.

It is curious to observe the inverse way of reasoning which prevails on these subjects, and which accounts, by its results, for the ruin of the lives of millions of unfortunate human beings. Thus when a contraction of credit brings about a fall in prices, which is the inevitable consequence according to the quantity theory, and when this fall in prices brings about a slump in trade, as it inevitably must, instead of recognising the obvious connection between cause and effect it is promptly and obstinately asserted that the fall in prices is the result of the slump in trade. And when the slump in trade at home causes a falling off in our foreign trade, as it inevitably must do owing to the fall-

ing off in the purchasing power of the people, it is immediately asserted that the decline in trade at home is the result of the slump in foreign trade. Similarly, when the depreciation of our paper money as the result of inflation causes a rise in the price of gold and, therefore, a fall in the foreign exchanges owing to the fact that the gold value of our paper is less, it is at once asserted that the price of gold is moving in sympathy with the foreign exchanges instead of the foreign exchanges moving in sympathy with the price of gold.



## CHAPTER FOURTEEN

### GOLD, PAPER, AND FOREIGN TRADE

EVEN granting the adoption of an inconvertible paper currency and prices regulated to a given level by means of the bank-rate by all the leading commercial countries, gold will probably be still the best available standard of value for international purposes if it does not depreciate too much. It is true that the system advocated here will enable us to view the possibility of the discovery of synthetic gold and a consequent fall in its value with equanimity since it will be a comparatively easy matter to calculate exchange values by the method of index numbers; but so long as it retains its value gold is obviously the most suitable international measure of values. It will have nothing to do with fixing prices but will have its own index number, and its price will be regulated by supply and demand just like any other commodity. It is obviously more convenient, however, to adjust exchanges in terms of one commodity uniform in quality, comparatively indestructible, and generally acceptable than

in terms of some hundreds which possess none of these attributes. A new par of exchange will have to be calculated between the various countries, but that is all.

One of the oddest features of the present situation is the tangle of vague and mutually contradictory beliefs held about the influence of paper prices in international trade. Thus we are told that one of the chief causes of bad trade is high prices, and one reason for hasty and disastrous deflation has been the necessity for reducing prices in order that wages might be reduced also, thus enabling us to sell more cheaply abroad. But this is sadly confused. So far as home trade is concerned the fall in prices has been more than offset by the fall in purchasing power, and it is just the fall in prices which has caused the trade paralysis. While prices and wages were high trade was booming. The slump followed and was caused by the fall.

As regards competition abroad it is a curious fact that while we are deflating our currency with the vague hope of increasing our competitive power, Germany is accused of inflating hers for exactly the same reason. In truth both these views are untenable. International debts have to be expressed in gold prices before they can be settled, and mere paper prices do not seriously affect competitive power in either direction. Thus Germany's depreciated cur-

rency means that she has to pay an enormous price, in paper, for her imports with a corresponding increase in the paper price of her exports. But all these things balance themselves when expressed in gold prices. The only way in which Germany's depreciated paper could enable her to sell more cheaply would be by reducing the real wages received by her workers; but ill-paid, and, consequently, ill-fed and inefficient labour is a very doubtful asset in international trade competition. Only an adverse exchange due to an adverse balance of goods will really increase selling power in foreign markets. If Germany has to pay large indemnities this will inevitably increase her selling power enormously by swinging the exchanges against her, since the debt must necessarily be paid in goods.

On the other hand, if high paper prices do not facilitate German competition neither do they reduce our selling power. High nominal wages due to a cheap paper currency are no higher really than low wages in a dearer currency. All this deflation merely reduces the price of gold so that the apparently lower wages now being paid are as high as ever when expressed in gold, the international currency, and thus our competitive power abroad has not been improved in the least, while our purchasing power at home has been paralysed.

It may be argued that the assertion that

depreciated currency in Germany does not enable Germany to compete more effectively in international markets is refuted by the fact that with British or American currency it is possible to buy goods in Germany at abnormally low prices. The fact appears to be as stated, and for this there are probably two main reasons. The first is obviously the fact that German workers, although receiving a wage which looks enormous when expressed in depreciated marks, are receiving real wages considerably less in purchasing power than before the war. The second is that though the mark is continually depreciating the rise in the cost of commodities follows some distance behind. Thus if a retailer has a large stock of goods in hand, as is usually the case during periods of depreciating currency owing to the fact that everyone is eager to exchange depreciating money for appreciating goods, and if there is a rise in prices through a further depreciation of the mark, he can still afford to sell his present stock at the old prices. But someone obviously loses on the transaction, mostly those with fixed incomes, and those with wages or salaries which rise less rapidly than prices. Yet these factors have not enabled the Germans to flood our markets with cheap goods.

Apart from the question of war indemnities the dread of Germany flooding our home

market with cheap goods and taking nothing in return is baseless. If the German traders send goods to our market they must take payment in return or they will be ruined. Indeed, if they did not take payment they would not be able to sell them. The effect of a large excess of exports from Germany to this country over exports from this country to Germany would be to swing the exchange against us and in Germany's favour. The effect of this would be to handicap imports to this country and put a bonus upon exports to Germany.

It would work this way. When the British trader came to pay for the goods which he had received from Germany he would find that he had to pay an enormously high premium in order to obtain a bill of exchange drawn upon Germany with which to discharge the debt. He would have to add this premium to his costs, and it would finally rise so high that it would no longer pay him to buy from Germany. On the other hand, the trader who sold to Germany and drew a bill upon the German trader would be able to sell that bill at a heavy premium. This premium he would be able to deduct from his costs, and this would enable him to sell more cheaply. Thus the exchanges would increasingly handicap imports from Germany and promote exports to Germany until the balance of trade was restored. This illustrates why we shall always be able to sell so long as

we keep up our purchasing power by maintaining the prosperity of our home trade.

Indemnities, of course, are a different proposition. If we take them we shall have to take them in the form of goods for which there will be no payment; in other words, no goods sent to Germany in return. It will be of no use attempting to keep the German goods out. Germany will probably pay in the first instance by buying up all the bills of exchange drawn upon London and sending them over here to discharge the debt. This will cause the exchange to go heavily against her, and will put a premium upon exports to this country. The trader who sells to this country will be able to draw a bill on London and sell it at a heavy premium. This premium will represent a drawback upon his expenses, and will enable him to sell more cheaply. The heavier the indemnity which Germany pays to us the heavier the premium which the German exporter to this country will be able to obtain. The premium will become such as to over-ride all attempts to keep German goods out, and rightly so, for it is of little use exacting indemnities from Germany unless we intend to accept payment in the only possible way.

If we wish to avoid a flood of cheap German goods the sensible thing to do is to let Germany take over our debt to the United States and thus let America have the benefit of the

German competition which will result.<sup>1</sup> This would be the equivalent of the payment of a similar amount to ourselves, since it would relieve us of that much debt, and we should not be troubled by the disorganising effect of a flood of cheap German goods upon our trade. Moreover, during the time Germany was engaged in paying America we should be relieved to a considerable extent from her competition in the markets of the world other than those of the United States.

A remarkably persistent illusion is the belief that the present exchange position between this country and the United States is due to an adverse balance of trade. Yet as far back as 1920 the Board of Trade published figures showing a probable surplus of exports, visible and invisible, over imports for the year of 180 million pounds (see *Board of Trade Journal*, August 12th, 1920). That there is no really adverse exchange can readily be shown by calculating what the United States, whose paper is at par with gold, is paying us for our paper. Gold is the standard of value in international exchanges for paper as well as for goods, and the following figures show what we were getting in gold for our paper from the United States at various dates.<sup>1</sup>

<sup>1</sup> The cent is here taken as a halfpenny, but is really slightly less.

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	Price of Gold	Value of Pound in Gold	N. Y. Exchange	Gold
	s.   d.	s.   d.		s.   d.
Feb. 2nd, 1920	117   6	14   5½	3'47 =	14   5½
July 5th, 1920	104   0	16   4½	3'94½ =	16   5½
Aug. 20th, 1920	115   0	14   9	3'60½ =	15   0
May 2nd, 1922	93   3	18   3	4'43 =	18   5½

Thus the United States has been paying us the full value of our paper in gold since very soon after the close of the war, proving that the apparently adverse exchange is due, not to an adverse balance of trade, but to the depreciation of our paper below the pre-war gold standard as the result of inflation. An exchange which gives us the full gold value of our paper cannot justly be called adverse.

This same question was fought out after the close of the Napoleonic wars, when it was made clear that the apparently adverse condition of the foreign exchanges which then prevailed was really due to the depreciation of our currency below the gold standard and not to an adverse balance of trade. It is to this that Macleod refers when he speaks of the general acceptance of the principle that the way to regulate currency and the foreign exchange is through the rate of discount or the bank-rate. Memories are short in such matters, however, and we have had a repetition of the same blunders, the same discussions, and the same illusions.

The close relation between the depreciation



of our paper and the condition of the foreign exchange is illustrated by the following figures showing the price of gold on certain dates and the New York exchange on the days immediately following.

Gold per oz.		N. Y. Exchange	
s. d.			
July 9th, 1920	. 104 1	July 10th, 1920	. 3'95
„ 16th, 1920	. 106 6	„ 17th, 1920	. 3'90
„ 23rd, 1920	. 108 3	„ 24th, 1920	. 3'81
„ 30th, 1920	. 110 9	„ 31st, 1920	. 3'75

It will be seen that there was a continuous rise in the price of gold throughout the month which meant an equivalent fall in the value of our paper. It is customary to speak of the price of gold "moving in sympathy with the foreign exchanges," but this is merely an illustration of the habit of putting the horse's head where its tail should be. It is the foreign exchanges which move in sympathy with the price of gold. The business of the exchanges is to exchange value for value, and gold is the standard of value in international commerce. In other words, the business of the exchanges is to translate paper values into their equivalent gold values and exchange value for value. The gold value of United States paper being at par it follows that the less the amount of gold our paper will buy the less the amount of the United States paper which will be given

in exchange for it. So as the price of gold rises the foreign exchanges move against us, and as the price of gold falls they move in our favour. And no matter what date is taken it will always be found that we are receiving from New York the full gold value of our paper within a cent or two, a certain amount of fluctuation, of course, being always apparent.



## CHAPTER FIFTEEN

### NEED RUSSIA AND GERMANY DEFLATE?

ONE of the main obstacles to an adjustment, by international agreement, of the present financial chaos which prevails throughout Europe is undoubtedly the extravagantly inflated condition of the currencies of some of the most important countries concerned, notably Russia and Germany. Now to bring back the currencies of these countries to something like pre-war levels would necessitate a long process of deflation with its attendant evils of commercial paralysis and disaster. The question arises as to whether it is possible to stabilise these currencies without such a process of deflation.

As a matter of fact prices can be stabilised at any level by means of an inconvertible paper currency and by the intelligent use of the bank-rate. But the objection to stabilising German and Russian currencies at the present level of prices is their preposterous unwieldiness. As a mere matter of book-keeping or inconvenience in the matter of pocket money it is obviously

undesirable to have, to pay 200,000 roubles for a pound of sugar or for a quarter of a pound of chocolates. But prices can be stabilised at this level and the unwieldiness got rid of by a very simple device without the necessity for deflation.

The Russian Government is said to be issuing notes of the value of 1,000,000 roubles, and these notes might very well be made the future unit of value. Suppose that such notes were given a special name to correspond with the sovereign or the dollar. Other notes could be issued on the decimal system for different values, as 10 millions, 100,000, etc., and each particular value could be given a different name. It could then be announced that the new notes would be exchanged for the old notes, and that the latter would no longer pass current after a certain date. The public would be glad to get rid of the bulky masses of the old notes, and they would soon get used to reckoning in the new ones. After a time, when the new notes were perfectly familiar, the value in roubles—hitherto printed on the new notes in small figures—could be dropped out, and the result would be a new currency having the same relative values as the present depreciated currency, but differently named and no longer unwieldy. There would be no deflation by this method. Prices would be stabilised at present levels, but the absurd unwieldiness of the

present currency would be abolished. Thus if the million rouble note was called a "Lenin" and divided into ten "Trotskys," each worth 100,000 roubles, then instead of reckoning a million and a half roubles the Russians would reckon a Lenin and a half or one Lenin five Trotskys.

Germany could follow much the same course. Her marks are now worth about 10,000 to the sovereign, so a new 1,000 mark note would make a very suitable unit of value, if given a definite name. Other values could be issued bearing other names. The new notes could be exchanged for the old ones, and the unwieldy currency could be abolished and prices stabilised without any necessity for deflation. Austria also could pursue this policy.

## CHAPTER SIXTEEN

### FINANCIAL POWER

"WAR," said Napoleon, "is a business of positions." And the favourite method of exemplifying this maxim employed by the great strategist was to take up a central position from which he could turn his arms at pleasure against either of two opposing armies and annihilate each separately before the other could come to its assistance. It was the way by which he put into practice the fundamental principle of strategy, which is to be strongest at the decisive point at the moment of decision.

But it is not only war in the military sense which is a business of positions. This is equally true of economic war. For modern commerce, especially in the circles of high finance, has come to be something more than a mere peaceful exchange of goods to the advantage of both the parties concerned. It is a fight for economic power. It consists of manœuvring for a position of economic advantage from which, once secured, the other party to the transaction may be caught in a

hopeless position and forced to surrender his goods at a fraction of their normal value. Modern finance under some circumstances is a ruthless form of warfare, with its own peculiar strategy and tactics, and a moral code to match—a war in which victory depends less upon the strength of massed battalions than upon a simple advantage of strategical position.

Take the case of Henry Ford, the manufacturer of cheap motor-cars, which occurred a few months ago. Caught by a sudden slump in trade with maturing obligations amounting to fifteen millions of pounds, he was only saved by superhuman exertions<sup>1</sup>—aided by sundry positional advantages which resulted from his own financial foresight, and which, in effect, compelled the dealers to assist in financing him—from being forced to surrender the control of his vast business to the Money Trust of Wall Street on terms dictated by the Trust itself. He was perfectly solvent. His assets vastly exceeded his liabilities. His resources in goods and securities were enormous. He was one of the richest men in the world. Yet he was nearly forced into an artificial bankruptcy and compelled to part with the gigantic business he had built up for a fraction of its real value.

His opponents held the advantage of

<sup>1</sup> His first step was to give orders to stop all buying and use up all the materials on hand, thus illustrating the cause of unemployment.

position. They had cornered the money market and held a monopoly of that money, those promises to pay, which alone are privileged to pass as legal tender. And the owner of money or legal tender promises to pay has much the same advantage of strategical position as that secured by Napoleon when he took up his position between two opposing armies. Indeed they have all the advantages of the central position and more besides. For money, as compared with goods, is relatively indestructible. It is not attacked by moth or rust. It does not go bad like eggs or milk or become obsolete or worn out like motor-cars. It renews its youth perpetually and, under normal circumstances, may be worth as much after a hundred years of use as when first called into existence. Its owner can afford to wait. It is not, as a rule, subject to such rapid and extensive depreciation in value as goods. And it can be converted into any particular class of goods at the shortest notice and used to discharge debts to any amount; whereas the owner of goods can neither discharge debts with them nor use them to purchase other goods until he can first turn them into money, and it often happens that he can only do this at an enormous sacrifice—a sacrifice which converts him from a prosperous creditor into a bankrupt debtor.

Yet money consists only of promises to pay, and Henry Ford could have promised to pay



as well as the next man. He had ample resources given time to realise them. And although it is true that time would have been needed this was equally the case with the promises to pay issued by the Money Trust itself. Should Wall Street be suddenly called upon to redeem all its promises to pay it would become as hopelessly bankrupt as any merchant or manufacturer under similar conditions. The difference between the promises to pay held by the Money Trust and those which Henry Ford could have issued was that the former were based upon legal tender and the latter were not. And while all the former could not have been met on a sudden demand there was at least enough gold behind them to meet any probable emergency.

Henry Ford's promises to pay might have been safely taken by the holders of the fifteen millions of maturing obligations; but they were not obliged to take them, and the last thing they wished was to see Ford pay. They had seized an advantage of position which they were determined to use to obtain possession of Ford's business at a fraction of its real value unless he could pay with that legal tender which they were confident he could not get. Only Ford's enormous resources, economic foresight, and energy pulled him through.

This is a striking but quite typical example of the use and abuse of economic power,

particularly of that credit power which is founded upon the wealth of the community at large and upon currency laws passed by the community, but which is often ruthlessly used to the detriment of the community in order to line the pockets of a few fortunate or unscrupulous individuals. And there is really nothing new about this. In the Middle Ages, in the days of Ancient Rome, and, apparently, almost since the very dawn of history the greatest profits in commerce have been made, not by the manufacturers or the workers or the merchants, but by the holders of promises to pay who have abused their position of economic advantage for their own profit. They have used the credit which is based upon the labours of the manufacturer and the worker to force the manufacturer into bankruptcy and the worker into slavery, while their victims have obligingly passed and maintained the very laws which have enabled them to do it.

We need a reform of our credit system which will render these things impossible. It should be impossible for a merchant or manufacturer, perfectly solvent and with abundant resources if only given time to realise them, to be forced into bankruptcy to satisfy the unscrupulous greed of other men. Any manufacturer or merchant whose position is sound should be able to obtain at any time credit within a reasonable margin of safety. He should be

able to obtain, at a moderate and reasonable rate of interest, credit to the value of say two-thirds of his goods. He would then be in no danger of being forced into an artificial bankruptcy, and would always be in a position to command the credit to develop and extend his business on sound lines, thus avoiding those periods of industrial stagnation which are the direct result of a contraction of credit.

## CHAPTER SEVENTEEN

### THE RIGHT TO CREDIT

SUCH considerations as those set forth in the preceding chapter have led some students of finance to argue, not only that every business man should have a right to credit up to 50 or 75 per cent. of the appraised value of such property as he can offer as security, but that this credit, being based upon his own property, should be free from interest. This is the position taken up by Sir Oswald Stoll, and he has the support of Mr Kitson.

But the right to credit and the right to free credit are two different things. In the first place a banker, who is really a manufacturer of purchasing power, has as much right to be paid for his work and his risk as any other manufacturer. He must pay his staff, his rent, and other expenses, and he also has a right to a percentage of profit on the material in which he deals. Credit is often talked about as if all the banker has to do is to pocket profits without work and without risk. But the work of a banker demands as much judgment as the work

of any other profession, while the long list of bank failures speaks eloquently enough of the risk.

Too often, also, the banker is depicted as a sharper whose interests are in conflict with the interests of both business men and labour. Thus Kitson declares that "Finance, which controls capital, is essentially the opponent of labour, since each is working to destroy the object which the other desires. Labour desires such an abundance of wealth that all may enjoy the good things of life 'without money and without price.' Finance desires relative scarcity so that money shall be all-powerful in controlling both wealth and labour."<sup>1</sup> Yet it is just those periods of financial crisis, which are so disastrous to labour by reason of the unemployment caused, which lead to panics and bank failures. The truth is that the banks have exactly the same interest in a healthily organised currency system as business men and workers. The more swiftly and smoothly the wheel of wealth turns the greater will be the profit of the bankers and the less the risk they run.

The arguments put forward in favour of free credit and inflation are often very fallacious. "Suppose, for example," says Mr Kitson, "the banks loan to manufacturers and merchants £1,000,000,000 at the bank-rate. The borrowers must then return to their banks

<sup>1</sup> *A Fraudulent Standard*, p. 77.

£1,070,000,000, that is £70,000,000 more credit than has been issued. How are they to get it? "<sup>1</sup> But the answer is very simple. The banks pay out the £70,000,000 in the form of salaries, rents, dividends, etc., and the currency thus issued finds its way into the hands of the manufacturers and merchants. The accounts of the bank must balance, and not a penny more is received by them than is issued in one form or another.

Both Kitson and Stoll fail to realise that in proposing to abolish interest they are proposing to abolish the only true and effective regulator of prices. Without a properly adjusted discount rate there would be no safeguard against the most reckless inflation, and prices would leap up enormously for a time, until the inevitable crash came. If no interest was charged, and it was, nevertheless, desired to guard against inflation, it would be necessary to strictly limit the amount of credit issued. The result would be a keen competition for the amount of credit available, and those who obtained a share, whether through luck or favour, would be able to promptly sell it at a substantial profit, which they would thus pocket as a reward for merely putting in an application.<sup>2</sup> Apparently the bankers

<sup>1</sup> Kitson, *Unemployment*, p. 40.

<sup>2</sup> An excellent illustration of how this sort of thing works out in practice is provided by the Indian exchange. The collapse of the rupee after the war led the Indian Government to attempt to bolster up the exchange by

would have the privilege of paying their expenses out of their own capital. It would be more rational to nationalise the banks and for the country to take the profit than to let the profit drop into the pockets of casual individuals who have done nothing to earn it; but we have already seen that nationalisation is by no means necessary. The bank-rate is the great commercial regulator with which we cannot dis-

selling Reverse Councils (drafts on London) during 1920 at far below their real value. For some time, while the rupee was worth only 1s. 5½d. in gold, they were actually selling £1,000,000 of Reverse Councils per week at the rate of 2s. 4½d. per rupee, the sterling equivalent of the rupee at ten to the gold sovereign. Their idea was to maintain the rupee at ten to the sovereign by this means although it was selling at fifteen to the sovereign in India at the same time. (See *The Times*, City Notes, June 17th, 1920, and June 22nd, 1920.) The applicants who were fortunate enough to get part of this sum allotted to them simply sold at a profit of about 33 per cent. The cost to the Indian taxpayer was several hundred thousand pounds per week, and the effect upon the exchange nil. Of course the rupee should be treated as an inconvertible banknote along the lines sketched out in previous chapters. This was actually done a few decades back. The rupee having depreciated heavily it was decided, in 1903, to try the experiment of closing the mints to further coinage until it should have acquired a "scarcity value." The experiment was completely successful. The exchange was restored, and the principle involved is exactly the same as is advocated in this book. The rupee can only be stabilised by adapting issues to prices. The system of the "gold exchange standard," although a convenience for business men trading with India, will never persuade them to give a sovereign for 10 rupees when it is really worth 15 rupees, even if the Indian Government are foolish enough to do so.

pense, but which we should insist upon being intelligently used.

There is much more to be said in favour of every man having the right to credit to the extent of 50 or 75 per cent. of the appraised value of such security as he can offer. Business men, who have laboured to establish great industries, have a right to protection against the attacks of financiers of the predatory order, especially as constant amalgamations tend more and more towards the formation of financial trusts in all the leading commercial countries.

Financial piracy is much more frequent in America than in this country. We have seen the danger which threatened Ford. Kitson gives other good examples. "During my own experience I have seen half a dozen men at a private dinner party plan a financial 'coup' which a few days later gave them the possession of many millions of dollars of wealth without their investing a solitary nickel piece! I was the unwilling witness of the ruin of a railway magnate who refused to sell his control of a certain railroad at the bidding of an all-powerful syndicate at the figure they offered. Whereupon the syndicate ordered the banks to call in all their loans on the shares and bonds of this road held by them as security, with the result that a panic ensued and the securities were thrown upon the market and bought by the syndicate at half the figure they originally tendered!



I have seen several firms whose assets were worth twice the amount of their debts, deliberately ruined by being thrown into the Bankruptcy Court; as they could not obtain sufficient legal tender to meet their liabilities on demand (their creditors being their own bankers, who were hoarding large sums of money) they were forced into liquidation.”<sup>1</sup>

Against this kind of licensed criminality the law should offer protection, and it could readily be given by compelling banks to advance money, at current rates of interest, up to 50 or 75 per cent. of the appraised value of the security offered. It would then be impossible for a solvent firm to be forced into the Bankruptcy Court by unscrupulous creditors, or forced to sell property at far less than its real value. The rate of interest would be governed by the bank-rate and this again by prices, and the banks would thus be completely safeguarded against being forced into a policy of reckless inflation. This, in conjunction with the policy previously sketched out would give a stability of prices, a freedom from panics, and a continuity of enterprise and prosperity hitherto undreamed of.

<sup>1</sup> *A Fraudulent Standard*, pp. 22-3.

## CHAPTER EIGHTEEN

### THE DOUGLAS SCHEME<sup>1</sup>

PERHAPS the best way to criticise the Douglas scheme, which has lately attracted a good deal of attention, will be to go straight to its practical proposals, leaving the consideration of the assumptions upon which these proposals are based for later discussion. As far as can be made out from the cloud of ambiguous phrases in which the proposals are obscured, it is proposed to sell all ultimate products (i.e., those goods for final consumption as distinct from those which are utilised in the production of other goods) at a price which shall bear the same ratio to the cost of production as the total consumption of all kinds of commodities bears to our total estimated productive capacity. And as it is asserted that our total consumption is only about a quarter of our productive capacity, the proposal is that we shall sell ultimate pro-

<sup>1</sup> *Economic Democracy*, Major C. H. Douglas, and *Credit Power and Democracy*, C. H. Douglas and A. R. Orage.

ducts at a quarter of the cost price, the difference to be made up to the manufacturer from the National Credit Account by the simple expedient of printing Treasury notes to that amount.

Leaving aside the reasons for this, let us examine what the proposal implies. A very moderate estimate of the total amount of ultimate products annually consumed in this country would be a thousand million pounds. Probably it is considerably more. But on that figure only the proposal means that we shall print no less than seven hundred and fifty millions in Treasury notes in a single year. The total amount of notes of all kinds circulating at the present time is about half that sum, and we know that this amount has been sufficient to about double prices as compared with the period before the war.

So vast an issue of Treasury notes over and above those already in circulation would at least double prices again. This would mean that the difference between cost and selling price would be doubled also, with the result that it would be necessary to issue double the amount of Treasury notes next year to make up the difference. This would double prices once more with a corresponding doubling of the amount of Treasury notes to be issued, and so the amount necessary would rise year by year in practically a geometrical progression, prices fol-

lowing in a geometrical progression also. Even without the geometrical progression something like seven thousand five hundred millions would be issued in ten years; but as the geometrical progression of prices and issues would be inevitable, it would mean that before many years had passed the whole of these islands would be covered with a layer of Treasury notes many feet deep.

Mr Orage, however, declares that "no inflation is involved, since already the credit advanced has been spent."<sup>1</sup> It is difficult to see how that affects the matter. The extension of credits or the issue of Treasury notes produces effects in no way modified by the fact that such issues are before or after a given event. It matters nothing to the quantity theory whether issues are made on Christmas Eve or Boxing Day. The intervention of Christmas Day in no way modifies their effect on prices. It is a little difficult, indeed, to see how money can be spent before it is issued, but assuming that this feat is accomplished, the resulting effect on prices will be just the same.

Another dictum of Mr Orage is that there is "no harm in an abundance of money *provided* prices are not allowed to rise."<sup>2</sup> And he further declares that such issues "cannot possibly affect prices except by reducing them; since

<sup>1</sup> *Credit Power and Democracy*, p. 207.

<sup>2</sup> *Ibid.*

prices, under the Scheme, are fixed, *not* by the relation of Money to Goods, but by the relation of credit consumed to credit produced."<sup>1</sup> Apparently Mr Orage sees some wonderful property in this ratio which enables it to overthrow the ordinary laws of arithmetic and dispense with the quantity theory of money. Or is it that he has fallen into some confusion of ideas in regard to the Douglas scheme?

He has evidently misunderstood the proposals of Major Douglas in regard to regulating prices, which he appears to understand in the sense of keeping down prices. Major Douglas, however, speaks of "a price regulated (not fixed)";<sup>2</sup> and that is where the misunderstanding comes in, for the Douglas scheme contains no provision whatever for regulating prices in the sense of keeping them down. All that it proposes is to regulate prices according to the ratio between the consumption of all kinds of commodities and our capacity for producing them. Now with the issue of such vast quantities of paper money costs of production would rise enormously and, the ratio still remaining the same, prices to the consumer would rise to the same degree. Thus if costs of production were originally 10s. the price to the consumer, under the one to four ratio, would be 2s. 6d.; but when the costs rose to a

<sup>1</sup> *Credit Power and Democracy*, p. 208.

<sup>2</sup> *Ibid.*, p. 92.

pound the selling price would be 5s.; while when costs rose to £2 the selling price would be 10s., and so on indefinitely, the price steadily rising but the ratio remaining the same. Even if there was any attempt to keep down prices under such circumstances it would be utterly useless. Similar attempts have been made in the past with the assistance of prison, the galleys, and irons, but they have always failed. It may be pointed out that costs are largely dependent upon imports, and with such vast issues of paper money the exchanges would go against us to an unprecedented degree and all imports would rise in price accordingly.

The great difficulty in criticising the Douglas scheme arises from the extraordinary obscurity of its exposition. For instance we are told that we must first grasp the distinction between financial credit and real credit, the former being a correct estimate of the ability to deliver money and the latter a correct estimate of the ability to deliver goods. Neither of these can be accepted as a satisfactory definition of credit, but suppose that we accept them for the time being. We then get such assertions as this: "Our total National Production of Real Credit is at least four times our total National Consumption of Real Credit."<sup>1</sup> Paraphrasing the passage according to the above definition we get this: Our total national production of a correct

<sup>1</sup> *Credit Power and Democracy*, p. 195.

estimate of ability to deliver goods is at least four times our total national consumption of a correct estimate of ability to deliver goods. Again: "The only *value* of Production lies in its Real Credit; and its Real Credit consists in the belief or estimate that it can deliver goods as required."<sup>1</sup> In other words: The only value of production lies in the belief or estimate that it can deliver goods as required. And these curiously rambling statements are from Mr Orage, whose commentary is supposed to supply that lucidity of statement which Major Douglas's expositions conspicuously lack. If by real credit is meant simply productive capacity it would surely be better to use that expression rather than obscure the subject with pretentious, pseudo-scientific phrases.

The idea underlying this proposed ratio seems to be that our productive capacity vastly exceeds our present consumption, and that it would be possible to stimulate both production and consumption up to full capacity by issuing purchasing power sufficient to absorb all that we can produce. Thus Major Douglas declares that "*the business of a modern and effective financial system is to issue credit to the consumer, up to the limit of the productive capacity of the producer, so that either the consumers' real demand is satiated, or the producers' capacity is exhausted, whichever happens*

<sup>1</sup> *Credit Power and Democracy*, pp. 197-8.

*first.*"<sup>1</sup> And in another place he says: "If, however, of the financial credit, or purchasing-power, which we distribute during the first six months we only take back in prices that portion represented by the ratio of actual consumption to potential production, we can, *if we so desire*, produce up to the limit of our capacity during the second six months in the assurance that an effective demand awaits us."<sup>2</sup> Thus, stripped of all obscurities, the Douglas scheme is merely a proposal to over-issue credit, or inflate, in the present in order to stimulate production in the immediate future. To this proposal it may be replied that, while inflation does undoubtedly stimulate production, it accomplishes nothing that would not be just as effectively accomplished by stability of prices, that such inflation is merely the forerunner of future deflation, and that in Germany, and other countries where inflation has been given a free trial, it has produced no such phenomenal expansion of production as the exponents of the Douglas scheme appear to anticipate. That may be due to lack of confidence in the future; but confidence is best maintained by stability of prices, not by inflation. •

It will be worth while to look a little more closely at the assertion that if, during the first six months, "we only take back in prices that

<sup>1</sup> *Credit Power and Democracy*, p. 106.

<sup>2</sup> *Ibid.*, pp. 102-3



portion represented by the ratio of actual consumption to potential production, we can, *if we so desire*, produce up to the limit of our capacity during the second six months in the assurance that an effective demand awaits us." This passage embodies the fallacy which underlies all proposals for stimulating consumption by over-issuing purchasing power. At first sight nothing appears more obvious than that if we issue, say, twice as much purchasing power in the first six months as the estimated value of the goods to be produced then half the purchasing power will remain unspent and will be available for absorbing the much larger amount of goods which, we may assume, will be produced during the second six months. But this is a pure illusion. The over-issue of purchasing power during the first six months will merely double prices, and all that purchasing power will be absorbed in purchasing the goods produced. There will be none left over for the second six months. And, prices having doubled, a similar quantity will have to be issued during the second six months in order to absorb the same quantity of goods, or else there will be a period of deflation with falling prices and the usual commercial depression. It is true that such over-issues will have the effect of stimulating trade, but only by raising prices and thus leading to free buying. The effect will be just about the same as the effect

of a dose of opium upon the human organism, to be inevitably followed by a reaction; and will be just about as wise.

The complementary fallacy is to be found in the assertion of Mr Kitson, that "Major Douglas found, by a system of costings, that the purchasing power distributed to the public by the industrial system in all countries could not possibly enable them to purchase more than a small proportion of the goods made, even if these were offered at the minimum price of bare costs."<sup>1</sup> As a matter of fact the purchasing power issued to the public is *always* sufficient to enable them to purchase all the goods produced. It is merely a question of price. Booms are caused by the issue of purchasing power in *excess* of the output of goods so that prices have to expand in order to absorb it. A contraction of credit contracts prices, so that the amount of purchasing power issued is still sufficient to enable the public to buy all the goods produced; but they refrain from purchasing on a falling market because to do so would be to incur loss. Major Douglas's "discovery" is closely analogous to the fallacy uttered by Mr Kitson in regard to the issues and intakings of the banks which is criticised in Chapter Seventeen. It appears to lie in assuming that because certain overhead charges, such as depreciation, are not covered by the

<sup>1</sup> *Unemployment*, p. 52.

total amount paid out in wages, salaries, and dividends by the firm in question, although charged in the selling price, therefore a corresponding quantity of purchasing power is not issued or that a greater quantity is taken back by the banks than is issued by them. But the depreciation charges are represented by certain sums deposited in the banks, and these are either issued in payments for replacements, or are issued in the form of fresh capital for the construction of new buildings and similar works. As already pointed out, the accounts of the banks have to balance and they do not receive a penny more than they issue.

The Douglas scheme apparently looks forward to a time when, the output of the country having been developed to the full or else consumers being satiated, it will no longer be necessary to sell below cost. But, taking the second alternative first, what is to be the test of satiation? We should still get a difference between consumption and potential production of a magnitude only limited by the vividness of people's imaginations, and the excuses for selling under price would still be there. As for the other alternative, productive capacity is always expanding and is always to some extent in excess of actual consumption. But productive capacity is a very indefinite thing, and to say that it is four times our consumption is very misleading and far from the truth. Of what use

is it to say of a given boot factory, for instance, that its productive capacity is four times its actual production when working normal hours? Of course no one can set any definite limit to increase of output, but any large increase will demand the putting down of the most up-to-date machinery, the introduction of the latest technical methods, and the most scientific factory management. The executive ability capable of achieving this, however, is comparatively rare. It would take years for most factories to even double their output, and it is idle to frame estimates of present capacity upon vague speculations as to what might be accomplished in perhaps ten years time. No accurate estimate of the full capacity of the nation is obtainable. We should get a variety of unreliable guesses put forward as estimates, and to dream of working up to these guesses by over-issuing purchasing power would be to chase a will-o'-the-wisp.

Criticising the credit proposals of Mr Kitson and his school, Major Douglas says: "This new purchasing-power would be effective in the market *before the goods* . . . and we should enter into the manufacturers' paradise and the consumers' purgatory—an era of constantly soaring prices and continuous depreciation of the currency."<sup>1</sup> All this is equally true of the Douglas scheme, but Major Douglas seems to have persuaded himself that the ratio which he

<sup>1</sup> *Credit Power and Democracy*, pp. 139-40.

proposes to establish will, in some mysterious fashion, neutralise all the 'rules of arithmetic. He is able to appreciate the 'evils of inflation only when it is proposed by other people.

There are other proposals of a curiously naive character. One is for a bank which is to have no capital itself, but which is to issue some nine-tenths of all the future capital needed by the mining industry. The source of the ability to do this is to be found in the following provision: "The Boards of Directors shall make all payments of wages and salaries direct to the Producers' Bank in bulk."<sup>1</sup> Mr Orage points out that the amount of wages and salaries paid per week in the mining industry is probably not less than £5,000,000, and he declares that "any bank in the world would consider itself prosperous with such a client at its disposal. An individual who should deposit in a bank five millions every Friday could carry on a considerable banking business, even if every other day of the week he should withdraw part of his deposits."<sup>2</sup> But Mr Orage fails to realise that the Directors of mining companies would not part with their money a day sooner than they were obliged, and if five millions were paid in on Friday this singular bank would merely have the privilege of paying it all out again on Saturday. Money earmarked for paying wages

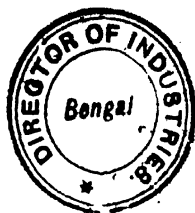
<sup>1</sup> *Credit Power and Democracy*, pp. 149 and 177.

<sup>2</sup> *Ibid.*, p. 178.

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and salaries could not be used to capitalise mines. This provision, so far from providing the wherewithal to raise hundreds of millions of capital, would not provide the rent of the bank premises or the wages of the staff of clerks. If the bank issued credit to the mines there would be absolutely nothing in the way of funds with which to pay the cheques.

The Douglas scheme is a sequence of similar fallacies. Stripped of obscurities and pseudo-scientific phrase-making it is simply a scheme for stimulating production by a prodigious over-issue of paper money. It is a proposal to subsidise the consumer, and to find the money by printing unlimited quantities of Treasury notes. A book might be filled in exposing the fallacies underlying it, but it would not be worth while, as Lenin, Trotsky and company have done about all that need be done in the way of illustrating the folly of reckless issues of paper money.



## CHAPTER NINETEEN

### SUMMARY AND CONCLUSION

WE have seen that the immediate cause of slumps is falling prices, which puts a stop to enterprise and compels everyone to buy no more than is indispensably necessary, on pain of loss. The cause of falling prices is the contraction of credit which follows a boom; the boom being caused by inflation, or an output of credit in excess of the output of goods. Deflation is an output of goods in excess of the output of credit, and the only way in which the two can be adjusted to each other under such conditions is by falling prices. Deflation and over-production are essentially the same thing, goods being produced, not in excess of the needs of the population, but in excess of the output of credit, with the result that prices fall and enterprise is crippled. The causes of these periodical outbreaks of inflation and deflation are partly the inelastic character of the gold basis of our currency, which does not permit an adequate expansion of credit when the economic machinery is working at full speed, and which

always exposes us to a sudden contraction of credit as the result of the export of gold; partly the utterly unscientific management of the currency, which leads to an output of credit sometimes in excess of the output of goods, and sometimes, when money begins to grow tight, in defect of the output of goods, with a slump as the result.

Even when there is a sufficiency of gold upon which to base issues of credit adequate to keep pace with the output of goods we still get the usual sequence of boom and slump owing to the absence of any scientific guiding principle in the management of the bank-rate. It is first kept too low, with the result that the bankers over-issue, thus causing what we call a boom. Then, when money becomes tight, the bank-rate is forced up very high in order to safeguard the bankers, thus producing a violent contraction of credit. Meanwhile, the more far-seeing business men, who are accustomed to look upon the sequence of boom and slump as being part of the inevitable order of things, begin to unload all their holdings as soon as they note the first symptoms of money tightness, which experience has taught them to accept as the sign of a coming slump. Their example is followed by others, and very soon everybody is selling and nobody buying. The bankers, in their anxiety to safeguard themselves, thus bring on the very financial crisis



and slump which they are afraid of. Prices fall, hands are dismissed wholesale, everybody ceases to buy in order to economise, with the result that prices fall still further, and so the impulse spreads like a contagious disease.

We can best insure ourselves against this recurring sequence of boom and slump by getting rid of the notion that gold is the indispensable foundation of our currency. Gold was merely adopted as the handiest makeshift available when the conception of a scientifically regulated currency had not dawned upon the imaginations of our fathers. Because it was good enough for our fathers it is not necessarily good enough for us. We know from experience that disastrous consequences may result from a currency based upon the payment of gold on demand even when there is no actual shortage of that metal. During 1896 a body of international financiers conspired to withdraw  $10\frac{1}{2}$  millions in gold from the Bank of England in order to send it to America, with the result that there was a fall in securities on the London Stock Exchange between August and October of that year of over £200,000,000, and a falling off in the transactions of the London Clearing House of £180,000,000 during September and October.<sup>1</sup> There was a corresponding rise in American securities, and as the conspirators had pre-

<sup>1</sup> See *A Corner in Gold*, Anonymous.

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viously sold in England and bought in America they gained heavily. England, of course, lost heavily. Such, however, is the force of habit and prejudice that the naive vanity involved in the boast that London is the great free gold market of the world is apparently a more than sufficient compensation for the ruin and unemployment which result. What are a couple of millions of unemployed, shrinking revenues, and the frustration of all our hopes of social betterment compared with the satisfaction of being able to boast that our currency is based upon gold and that London is a free gold market?

A currency based upon gold is not necessarily "sound" merely because we are used to it. Soundness does not consist in familiarity, but in efficient and satisfactory working, and the long record of disasters which have accompanied our gold-basis currency provides an ample commentary upon its claim to soundness. We have had abundant proof from experience that an inconvertible paper currency is perfectly sound unless it is issued in excess. It is true that we have had a gigantic slump under an inconvertible paper currency, but that was only caused by riotous mismanagement. We first had recklessly excessive issues, restrained by no scientific guiding principle, and then a spasmodic contraction with a slump as the immediate consequence. We want neither of

these, but issues scientifically regulated to maintain a given level of prices by means of the bank-rate and index numbers. Only when we get this shall we have a really scientific currency and be free from periodical slumps.

The bank-rate has been likened to the brake upon the economic wheel. It might also be likened to the throttle of a steam engine by which steam is admitted to or cut off from the piston. When money is cheap it pays business men to borrow because they can see their way to make a profit which will repay the interest and leave a substantial margin for themselves. Thus suppose that a business man can see his way to make 8 per cent. upon money invested in the extension of his business, and that he can borrow at 4 per cent. Obviously the way to make a fortune is to extend his business by means of borrowed capital as far as he can. But when the bank-rate is pushed up to 6 or 7 per cent. there is no margin of profit left which will make borrowing for business extension worth while.

On the other hand the same conditions which induce the business man to borrow or refuse to borrow also induce the man with money, to lend or refuse to lend. For when the bank-rate is high the rate of interest on bank deposits is also high, and, as prices are usually falling and conditions of investment risky at the same time, the man with money available naturally prefers to keep his money on deposit at the bank for the

time being. But when the bank-rate is lowered the rate of interest on deposits is lowered also. Simultaneously the prospects for investors begin to improve, so that the man with money on deposit at the bank has a double inducement to draw it out for investment at the time when the business man has every inducement to borrow. That is how the bank-rate acts as the regulator of credit just as the throttle of a steam locomotive regulates the steam pressure, and that is why the bank-rate is the natural regulator of prices. Credit is the steam power of modern commerce, and it obviously should be applied in larger measure when our economic machinery begins to run slowly, which is when prices fall, and should be cut off when our economic machinery is beginning to race, which is when prices rise. Yet the effect of our present system is to produce exactly the opposite result.

When commerce is booming the bankers, competing with each other for business, issue credit too freely and accentuate the rise in prices. But when money becomes tight, a result which is accelerated by excessive issues, they raise the rate of interest and begin to call in their loans. Their reasons for calling in their loans are, first, to strengthen their reserves, and, second, because they fear a fall in the value of the properties on which these loans are secured. Business men, unable to

renew their loans, are compelled to sell their stocks at a heavy sacrifice in order to meet their obligations. Prices fall, and the more rapid the fall in prices the more the bankers contract credit in order to protect themselves. The net result of it all is that they put on steam when it ought to be reduced and cut it off when the throttle should be opened. The measures they take accentuate the boom which they ought to check and bring on the very slump against which they are intended as a precaution. It is not so much the bankers who are at fault, however, as our currency system; but this does not prevent the bankers, whenever they have spread ruin and desolation around them as the inevitable consequences of this system, from joining the economists in celebrating the disaster in a hymn of praise to "sound" money. All the mischief results from compelling commerce to adapt itself to the exigencies of an inelastic and vicious currency system instead of adapting the currency system to the needs of commerce. It is the result of allowing the tail to wag the dog.

Consider how different the effects of a really sound system would be. The two controlling impulses which govern the bankers under the present system would be absent. There could be no serious tightness of money to dread since just as much could be printed as was needed, its issues being regulated by prices. Therefore

there would be no need to call in loans to strengthen reserves, and there would be no fear of a fall in the average value of the securities upon which these loans were issued. Panics would be almost impossible. Instead of clapping on steam when the machine is racing and cutting it off when the machine begins to run slowly, the bank-rate would be raised when prices began to rise and lowered when they began to fall, thus checking demand when it gave signs of out-stripping supply and stimulating purchasing power when the signs indicated that supply was beginning to overtake demand. Purchasing power would be increased when necessary and reduced when necessary. Steam would be clapped on and cut off according to the needs of our economic machinery not in direct opposition to its needs.

The opinion has been expressed that Mr Kitson was right in his view that the cause and cure of the unemployment trouble are not beyond the understanding of an intelligent schoolboy, and this can hardly be disputed. There is surely nothing very difficult to understand in the proposition that, given a definite and limited supply of credit as the result of an inelastic currency system, there is bound to be "tightness of money" whenever our economic machinery runs at high speed for a time and continues to throw off more and more goods. Given the truth of the quantity theory of money

there should be nothing difficult in the proposition that if credit ceases to expand while the output of goods is expanding more rapidly than ever there must inevitably be a sharp fall in prices. And anyone acquainted with the most elementary business principles must know that under such circumstances the only course for manufacturers, warehousemen, and retailers, who have laid in large stocks at top prices during the boom, is to cease to buy anything except what can be immediately disposed of until accumulated stocks are unloaded, while cutting down expenses in every possible way. For, though it pays to buy on a rising market because goods are appreciating and money depreciating, it is ruinous to buy on a falling market because goods are depreciating and money is appreciating. It is the instinct of both parties to a potential transaction to part with that which is falling in value and cling to that which is rising in value. But a desire on the part of both to sell only and refrain from buying is fatal to trade. The ideal condition for commerce is when both parties are equally willing to buy or to sell, and this condition is best realised by stability of prices, since then neither money nor goods are appreciating or depreciating in relation to each other. It should be obvious to the meanest intelligence, therefore, that the immediate effect of a sharp fall in prices will be trade stagnation and consequent

unemployment. It should be equally evident that the remedy is to secure stability of prices and that the only way to achieve this is to issue credit in a direct ratio to the output of goods. And what could be more indisputable than that the way to do this is to regulate the output of credit by means of the bank-rate according to the rise and fall of prices as manifested by index numbers? There is really nothing in all this, once it is pointed out, which is beyond the mental range of an intelligent schoolboy. Any schoolboy who is capable of grasping the most elementary principles of mathematics should be able to clearly understand it all. And once it is clearly grasped it will be possible for man to drive the economic wheel at a pace to suit himself instead of being merely a fly on that wheel to be crushed by its revolutions every few years, and always unable to regulate it in such a way as to provide himself with food, clothing, housing, and the various necessities of life in a regular and satisfactory manner.

The present position may last years according to present prospects and present methods of handling it. It is true that there are signs of reviving trade and that unemployment is diminishing at the moment of writing, but this merely illustrates the illogicality of the whole position. The revival first began to manifest itself after the reduction of the bank-rate from 5 to  $4\frac{1}{2}$  per cent. on February 14th of this year



(1922). At first it was confined almost entirely to gilt-edged securities and stocks paying a fixed rate of interest. The reason of this was that when prices are falling stocks paying a fixed rate of interest rise in relative value. But the decline in values has now been reduced and an upward movement is commencing. Money is plentiful, and confidence is beginning to return, resulting in an extension of the improvement to industrial stocks and a corresponding improvement in the position as regards unemployment. Moreover on April 13th the bank-rate was further reduced to 4 per cent. and on July 13th to 3 per cent., and this will certainly be followed by a further revival of trade.

But the Government stand committed to a policy of deflation. They propose to restore the paper currency to a par value with gold, and without further deflation this cannot be done. Now it is probable that the reduction of the bank-rate to 3 per cent. will be sufficient to cause a steady upward trend of prices. So long as this policy is continued we may expect a steady improvement in trade; but the Government will have to choose between the trade revival and the carrying out of their proposal to deflate the currency until it reaches a par value with gold. They can have a revival of trade *or* deflation; but they cannot have a revival of trade *and* deflation. In order to

resume the latter policy they will have to raise the bank-rate again and thus cause a further contraction of credit, a further slump in values, and a set-back to the trade revival accompanied by an increase of unemployment.

All this illustrates the utter vagueness of the ideas which prevail upon the subject; especially among those who control the bank-rate. The Government and the Governors of the Bank of England have drifted into entirely inconsistent positions. Yet only a continuity of policy on the part of the responsible authorities can maintain the confidence of the public. Only the maintenance of public confidence can produce an adequate revival of trade, and "confidence" means confidence that prices will fall no longer. We shall have a rapid and continuous revival of trade when, and only when, these indispensable conditions are fulfilled.

The present value of the pound reckoned in gold, however, is a little more than 18s., and this means that prices must fall another 10 per cent. if the declared policy of the Government is to be carried out and our paper restored to its par value with gold. Thus the guarantee which the Government at present offer to the investing public, far from being a guarantee against a further fall in prices, is a guarantee that all who invest money in commercial enterprises may look forward confidently to

having to wipe off 10 per cent. of the capital invested as dead loss, possibly before the undertaking is completed, and quite apart from ordinary depreciation. Under such circumstances trade is expected to flourish, and hopes of its recovery are indulged in; while the authorities are conscientiously convinced that unemployment is no fault of theirs, and that it is a matter beyond human wit to remedy!

Among the worst obstacles to the full development of the productive capacity of this country are the prejudice against piece work, the limiting of output, and the obstruction to the entry of fresh individuals to given trades. The dread of unemployment is the main factor behind all these things. A couple of centuries of experience of the continual periodical recurrence of unemployment has led to the conviction that unemployment is part of the natural order of things. But a policy which, by maintaining the same average level of prices and an adequate supply of money always available by means of a scientific currency, should permanently remove this long-standing dread, would remove with it the jealous hostility against all measures for increasing production. The greater part of our industrial troubles would then disappear automatically.

The policy sketched out in this work involves neither nationalisation nor any schemes of a wildcat character. It will cost nothing to put

into operation beyond the expenses of a few clerks and a competent statistician to calculate the index numbers; while the legal changes will be of the simplest. There is no risk whatever attending it and nothing but good can possibly come of it. It could be put into operation in a few weeks, and once the public had the assurance that there would be no further fall in prices, and that never again would trade slumps arise as the result of money tightness, they would begin to spend and invest freely. Enterprise would revive so promptly that it would be necessary to check the tendency to inflation; but that would be no misfortune for so long as credit is being issued on a scale adequate to purchase, at the accepted price level, all the goods produced, that is all that is required, for nothing is gained by inflating prices. Thousands of schemes long hung up as the result of falling prices would be put into operation. The number of unemployed would diminish steadily as the economic machinery gathered way, revenues would expand, and it would no longer be necessary to cut down housing and educational schemes for lack of funds.

With the additional provision that everyone should have the right to borrow money up to 50 or 75 per cent. of the appraised value of the security offered, at current rates of interest, the danger to business men of being ruined by

financiers of the piratical order would be at an end. Any danger of inflation arising from this policy would be automatically guarded against by the bank-rate, and the dangers which might arise from the formation of a financial trust would be ended also. The banks themselves would be free from the danger of recurrent crises as the result of money tightness, and their business would be more profitable and less risky than ever before. We should be able to go ahead with the problems of social reform with adequate funds available, should be able to pay off debt, lighten the burden of taxation, grapple with the housing problem, and, in short, do something really effective towards making this country a place "fit for heroes to live in."

## APPENDIX

It is probable that criticisms of the views set forth in this work will consist mainly of assuming that they imply a regular inverse correlation between the bank-rate and prices and in pointing out exceptions to this general rule. But there is nothing in such exceptions in any way inconsistent with these views. The bank-rate has never been used in such a way as to establish a regular relation between the rate of discount and prices, since, owing to the fact that the rate has been determined by the amount of gold in reserve instead of by the level of prices, it has sometimes been used in such a way as to accentuate a given rise or decline in prices, and sometimes used in such a way as to counteract the rise or decline.

Let us examine another example of the connection between the bank-rate and prices. Here is the list of changes in the rate of discount for the years 1906, 1907, and 1908:

Fixed at $3\frac{1}{2}$ per cent.	April 5th,	1906.
„ „ 4 „ „	May 3rd,	1906.
„ „ $3\frac{1}{2}$ „ „	June 21st,	1906.
„ „ 4 „ „	September 13th,	1906.

Fixed at 5 per cent.	October 11th, 1906.
" " 6 " " "	October 18th, 1906.
" " 5 " " "	January 17th, 1907.
" " 4½ " " "	April 11th, 1907.
" " 4 " " "	April 25th, 1907.
" " 4½ " " "	August 15th, 1907.
Panic in New York during October.	
Fixed at 5½ per cent.	October 31st, 1907.
" " 7 " " "	November 7th, 1907.
" " 6 " " "	January 2nd, 1908.
" " 5 " " "	January 16th, 1908.
" " 4 " " "	January 23rd, 1908.
" " 3½ " " "	March 5th, 1908.
" " 3 " " "	March 19th, 1908.
" " 2½ " " "	May 28th, 1908.

The panic in the United States was one of the worst on record, and it illustrates the viciousness of the gold standard system in making our commercial prosperity dependent upon the vagaries of foreign currency systems that our bank-rate was immediately forced up to 7 per cent. in order to protect our gold supplies. The effect on prices of these variations in the rate of discount can be seen in the following list of index numbers from *The Economist*:

	1906	1907	1908
January . . . . .	2322	2494	2309
February . . . . .	2304	2521	2266
March . . . . .	2306	2516	2263
April . . . . .	2337	2540	2195
May . . . . .	2372	2601	2188
June . . . . .	2362	2594	2190
July . . . . .	2329	2571	2190

	1906	1907	1908
August	2341	2119	2168
September	2355	2457	2200
October	2458	2414	2194
November	2501	2360	2198
December	2499	2310	2197

In order that a high or low rate of discount may have any considerable effect on prices it must be maintained for an adequate length of time. During 1906 the rate was varied up and down at quite short intervals, and the result was that prices remained remarkably steady throughout the greater part of the year, and, it may be added, it was a year of great commercial expansion, thus again showing that rising prices are not essential to trade development. But towards the end of the year the spirit of optimism which naturally develops as the result of a boom led to a marked tendency to inflation which the bank rate did not adequately check. As may be seen, the rate was lowered when prices were rising, whereas it should have been raised.

In America inflation proceeded to much greater lengths and finally resulted in money tightness, a crisis, and a panic. The effect of forcing up the bank-rate to 7 per cent. in order to protect our gold reserves is shown by the table. The effect on prices was immediate, but the fall did not go to such lengths as during the crash of 1920 because the high rate was only maintained for a few weeks, whereas



the 7 per cent. rate of April 15th, 1920, was maintained for a whole year, only being lowered to 6½ per cent. on April 28th, 1921. The effects on prices were proportionate to the length of time during which the respective rates were maintained. The authorities were justified in imposing a 7 per cent. bank-rate in 1920 in order to check inflation. Indeed they should have raised the rate much sooner; but immediately prices began to fall the rate of discount should have been lowered until the fall was checked. In 1907 the policy followed was necessarily dictated by the amount of gold in reserve.

Prices continued to fall pretty steadily from the imposition of the 7 per cent. bank-rate in October, 1907, until April, 1908, and a considerable amount of unemployment resulted. This, of course, was attributed to a falling off in demand resulting from the collapse in America. It was indirectly due to that, but the immediate cause was the contraction of credit resulting from the 7 per cent. bank-rate, and this was the result of the gold standard system which rendered it imperative to impose a high rate of discount in order to protect our gold reserves against raids from America designed to relieve the money tightness there. There could be no falling off in demand here as the result of a crisis in a foreign country under a scientifically organised currency system, since a falling

off in demand can only result from a loss of purchasing power due to a contraction of credit, and an unwillingness to buy as the result of falling prices. A properly managed currency system would keep prices stable, and, our purchasing power being kept up, foreign countries could be trusted not to refuse payment for the goods we bought from them, and such payment would necessarily be in the form of goods.

It is essential to remember that the rate of discount, although the controlling factor, is only one factor in fixing prices, in much the same way that the rudder of a boat, although undoubtedly the steering instrument, is only one factor involved in the act of steering. Winds, waves, and currents have to be taken into account. To steer a given course diagonally across the Thames at Richmond it would be necessary to hold the rudder in a very different position if the tide was running out from that which would serve if it was coming in. Moreover, the rudder is not less the steering instrument because it can be shown that the boat sometimes fails to answer the helm properly, and that it may even be necessary at times to steer with the oars.

The factor in the making of prices which is next in order of importance to the rate of discount is the psychological condition of the people—whether they are in an optimistic or a pessimistic mood. It is much more easy to

destroy optimism than to restore it, and much more easy to shatter an elaborate credit organisation than to build it up again. After a very long period of falling prices, and under conditions which provoke a pessimistic mood, even a very low bank rate may fail for a time to arouse optimism and stimulate enterprise. Thus after several years of depression caused by the South African War the bank rate was reduced to 2 per cent. in February, 1904, and remained at that figure for the rest of the year and throughout 1905. But even that low figure failed to produce a rise in prices, and they were even slightly on the down grade. It was a period of gradual recovery, but prices did not begin to rise again until 1906. It was also a period of agricultural depression with disastrous crises in Australia and the United States, and it is probable that the pessimistic feeling resulting from these factors and several years of declining prices accounts for the slowness of the recovery in spite of the very low rate of discount.

But this very fact illustrates the superiority of a scientifically regulated paper currency to the gold standard system. Under the former such a position could not arise, since there would be no long periods of declining prices to create pessimism, and if all the leading commercial countries adopted the same system there would be no crises abroad to cause depression. While.

assuming that such a position could arise, it would be perfectly easy to give a fillip to prices if necessary by issuing more Treasury notes or bank-notes. Thus in Germany the bank rate was kept at 5 per cent. for a very long time, and has now been raised to 6 per cent.; but the rate of discount has had no effect on prices because the German Government persists in printing vast quantities of paper money and using this money to pay its expenses. In a somewhat similar way it would be easy to give a fillip to a sluggish market in this country under an inconvertible paper currency system, if required; but there is little likelihood that it would be necessary. Of course, recovery from such a slump as that out of which we are now gradually passing would require time under any system, since a vast credit and business organisation which has been destroyed has to be built up again; but once it is restored there is no reason why it should again be destroyed through a wholesale collapse of prices.

If it be urged that the effect of a high bank-rate on credit issues would be neutralised to some extent by business men passing on the higher rate of interest to their customers through the medium of higher prices, the reply is that this does occur to some extent under the gold standard, especially during boom times, but possibilities in this direction are limited, and it would be impossible under a scientific cur-

rency system. Under the former system the control of the bank-rate over issues is very imperfect, owing to the fact that the issues of legal tender depend upon the amount of gold available, and this varies constantly; while the amount of book credit issued is mainly dependent upon the supply of legal tender. There is no control over the psychological factor, to speak of, and the bank-rate has to act chiefly through its effect upon the rate of circulation. But under a scientific currency system the bank-rate would control the amount of legal tender issued, the amount of book credit issued, and also the rate of circulation. And through its effect upon these factors it would control the psychological factor also, since we know that the expectation of a rise or fall in prices, by stimulating buying or selling, tends to produce that rise or fall. . . . On the other hand, the expectation of steady prices would tend to keep them steady by eliminating both selling through fear of a fall, and speculative buying in expectation of a rise. With steady prices profits, although also much steadier, would probably be cut much finer by competition, and the business man who borrowed at a high rate of interest would be liable to burn his fingers. A raising of the bank-rate, therefore, would give a check to rising prices in proportion to its height, especially to that borrowing for speculative purposes in anticipation of a rise in prices

which is the chief cause of the rise during boom times.

In addition to these considerations, it would always be possible to reinforce the action of the bank-rate, if necessary, by refusing to grant loans for speculative purposes when it was desired to check inflation. If it be argued that this proposal is inconsistent with the proposal previously laid down that every business man should have the right to borrow up to, say, two-thirds of the appraised value of such security as he can offer, at current rates of interest, in order that he may be protected against victimisation, this difficulty could be overcome by instituting some central body for the purpose of hearing appeals from business men whose loans had been refused. Such a body might consist of a nominee of the bankers, a nominee of the manufacturers and merchants, and a nominee of the Government. The general impartiality and fairness of a body so constituted could be relied upon. While the general right of business men to a loan at current rates of interest was recognised by law a discretionary power could be left to the bankers subject to appeal to this central body, and in this way the most perfect control over issues could be obtained, even in times of speculative mania, without seriously infringing the principle previously laid down to safeguard the interests of business men. This discretionary power would only be used to contract credit

when the tendency to speculation rendered it difficult to check a rise in prices without forcing up the bank-rate to an undesirable figure. It is questionable whether it would be necessary to use it at all, but in the event of its use any business man feeling that he had a grievance could appeal to the central body appointed for the purpose. It would then be necessary for the banker to justify his refusal on the ground that the loan demanded was for speculative purposes, or for the business man to show that it was necessary for his business in order to protect him from victimisation. Neither refusals nor appeals would be likely to be numerous except in the event of an outbreak of extreme speculative mania; since bankers would hardly attempt to abuse their power with a court of appeal available, while business men would recognise the necessity of preventing inflation and the futility of appealing on behalf of loans for merely speculative purposes.

It may be asked: Why not fix the bank-rate permanently at a suitable figure, say,  $2\frac{1}{2}$  per cent., and control all issues by this method, thus giving business men the advantages of a permanently low rate of interest? The answer is that such a course would throw upon the bankers a power and an invidious responsibility such as they have never exercised before and which they would probably decline to under-

take. In the ordinary course of business the banker cares little what the purpose of a given loan may be provided that the customer offers good security, since he can realise upon the security if the loan is squandered. But in the event of the bankers being charged with the regulation of all issues to maintain a given level of prices, this would compel them to inquire into the merits of every loan and the inevitable result would be an enormous crop of disputes and appeals. If there are no disputes under the present system during times of credit contraction it is, because there is no appeal, and business men are ruined wholesale in consequence. We need to avoid that by some method which will act as automatically as possible and reduce invidious discrimination to the minimum. The bank-rate is the best instrument for such a purpose, and it is probable that it could be done with an average rate of discount not very far in excess of  $2\frac{1}{2}$  per cent. The fears of a very high rate of discount being necessary are quite baseless. It is the outbreak of speculative buying in anticipation of a rise in prices which causes inflation in times of prosperity, and the mere existence of such a discretionary power in the hands of the bankers and the readiness to use it to prevent a rise in prices if necessary would probably suffice to prevent mere speculative buying without using it at all. What speculator would buy in antici-



pation of a rise when he knew very well that there was not going to be any rise? And as only rising prices would enable business men to borrow at a high rate of interest and yet make a profit a very slight rise in the discount rate would suffice to give a check to borrowing. On the other hand, no business man need fail to obtain a loan on reasonable terms for sound business development because he would only require to wait until the check to borrowing caused the rate of discount to fall again.

The story of the recent slump offers peculiarly valuable lessons owing to the clear-cut way in which the various phenomena worked out and the fullness of the information available. It may perhaps be worth while to place together the index numbers and the unemployment figures for the months immediately succeeding the imposition of the 7 per cent. bank-rate on April 15th, 1920.

	Trade Union Unemployment Percentages.	Index Numbers.
March . . . . .	1'1	379'6
April . . . . .	0'9	374'2
May . . . . .	1'1	372'7
June . . . . .	1'2	356'7
July . . . . .	1'4	358'0
August . . . . .	1'6	352'0
September . . . . .	2'2	347'5
October . . . . .	5'3	326'1
November . . . . .	3'7	299'7
December . . . . .	6'0	269'3

The lowest figure reached by the index numbers was 103·6 in February, 1922, over a year later, so that the fall during the eight months following the imposition of the 7 per cent. bank-rate was much greater than the whole subsequent fall; whereas the main increase in unemployment figures came during the first six months of 1921, the percentage rising to 23·1 in June. These figures prove conclusively that it was the slump in prices which caused the slump in trade, and not vice versa. The latter, indeed, would be impossible, since if there should be a slump in production without a corresponding contraction of credit prices would rise, not fall. If it be asserted that it was a falling off in demand which produced the contraction of credit, this is not only flatly refuted by the facts but is a logical impossibility since effective demand is measured by purchasing power, and only a contraction of credit can cause a falling off of purchasing power.





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